Juan Manuel RuÃ-z-Lozano

List of Publications by Year
in descending order

95 papers	10,888 citations	34493 54 h-index	53065 89 g-index
96 all docs	96 docs citations	96 times ranked	7067 citing authors

#	Article	IF	Citations
1	Elucidating the Possible Involvement of Maize Aquaporins in the Plant Boron Transport and Homeostasis Mediated by Rhizophagus irregularis under Drought Stress Conditions. International Journal of Molecular Sciences, 2020, 21, 1748.	1.8	17
2	Radial water transport in arbuscular mycorrhizal maize plants under drought stress conditions is affected by indole-acetic acid (IAA) application. Journal of Plant Physiology, 2020, 246-247, 153115.	1.6	35
3	Elucidating the Possible Involvement of Maize Aquaporins and Arbuscular Mycorrhizal Symbiosis in the Plant Ammonium and Urea Transport under Drought Stress Conditions. Plants, 2020, 9, 148.	1.6	20
4	Contribution of the arbuscular mycorrhizal symbiosis to the regulation of radial root water transport in maize plants under water deficit. Environmental and Experimental Botany, 2019, 167, 103821.	2.0	33
5	Phenotypic and molecular traits determine the tolerance of olive trees to drought stress. Plant Physiology and Biochemistry, 2019, 139, 521-527.	2.8	14
6	The arbuscular mycorrhizal symbiosis regulates aquaporins activity and improves root cell water permeability in maize plants subjected to water stress. Plant, Cell and Environment, 2019, 42, 2274-2290.	2.8	69
7	Rhizobial symbiosis modifies root hydraulic properties in bean plants under non-stressed and salinity-stressed conditions. Planta, 2019, 249, 1207-1215.	1.6	14
8	Molecular Insights into the Involvement of a Never Ripe Receptor in the Interaction Between Two Beneficial Soil Bacteria and Tomato Plants Under Well-Watered and Drought Conditions. Molecular Plant-Microbe Interactions, 2018, 31, 633-650.	1.4	23
9	Arbuscular mycorrhizal symbiosis and salicylic acid regulate aquaporins and root hydraulic properties in maize plants subjected to drought. Agricultural Water Management, 2018, 202, 271-284.	2.4	56
10	Involvement of the def-1 Mutation in the Response of Tomato Plants to Arbuscular Mycorrhizal Symbiosis Under Well-Watered and Drought Conditions. Plant and Cell Physiology, 2018, 59, 248-261.	1.5	27
11	Improvement of Salt Tolerance in Rice Plants by Arbuscular Mycorrhizal Symbiosis. Soil Biology, 2018, , 259-279.	0.6	5
12	Arbuscular mycorrhizal symbiosis modifies the effects of a nitric oxide donor (sodium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (nitr lettuce plants under well watered and drought conditions. Symbiosis, 2018, 74, 11-20.	1.2	11
13	Tomato ethylene sensitivity determines interaction with plant growth-promoting bacteria. Annals of Botany, 2017, 120, 101-122.	1.4	16
14	Transcriptomic analysis reveals the importance of JA-Ile turnover in the response of Arabidopsis plants to plant growth promoting rhizobacteria and salinity. Environmental and Experimental Botany, 2017, 143, 10-19.	2.0	24
15	Ethylene sensitivity and relative air humidity regulate root hydraulic properties in tomato plants. Planta, 2017, 246, 987-997.	1.6	8
16	Arbuscular mycorrhiza effects on plant performance under osmotic stress. Mycorrhiza, 2017, 27, 639-657.	1.3	113
17	Enhanced Drought Stress Tolerance by the Arbuscular Mycorrhizal Symbiosis in a Drought-Sensitive Maize Cultivar Is Related to a Broader and Differential Regulation of Host Plant Aquaporins than in a Drought-Tolerant Cultivar. Frontiers in Plant Science, 2017, 8, 1056.	1.7	138
18	Exploring the use of recombinant inbred lines in combination with beneficial microbial inoculants (AM fungus and PGPR) to improve drought stress tolerance in tomato. Environmental and Experimental Botany, 2016, 131, 47-57.	2.0	104

#	Article	IF	Citations
19	Regulation of cation transporter genes by the arbuscular mycorrhizal symbiosis in rice plants subjected to salinity suggests improved salt tolerance due to reduced Na+ root-to-shoot distribution. Mycorrhiza, 2016, 26, 673-684.	1.3	152
20	Effects of different arbuscular mycorrhizal fungal backgrounds and soils on olive plants growth and water relation properties under wellâ€watered and drought conditions. Plant, Cell and Environment, 2016, 39, 2498-2514.	2.8	59
21	Arbuscular mycorrhizal symbiosis induces strigolactone biosynthesis under drought and improves drought tolerance in lettuce and tomato. Plant, Cell and Environment, 2016, 39, 441-452.	2.8	321
22	Arbuscular mycorrhizal symbiosis and methyl jasmonate avoid the inhibition of root hydraulic conductivity caused by drought. Mycorrhiza, 2016, 26, 111-122.	1.3	86
23	Localized and nonâ€localized effects of arbuscular mycorrhizal symbiosis on accumulation of osmolytes and aquaporins and on antioxidant systems in maize plants subjected to total or partial root drying. Plant, Cell and Environment, 2015, 38, 1613-1627.	2.8	91
24	Arbuscular mycorrhizal symbiosis ameliorates the optimum quantum yield of photosystem II and reduces non-photochemical quenching in rice plants subjected to salt stress. Journal of Plant Physiology, 2015, 185, 75-83.	1.6	151
25	Autochthonous arbuscular mycorrhizal fungi and Bacillus thuringiensis from a degraded Mediterranean area can be used to improve physiological traits and performance of a plant of agronomic interest under drought conditions. Plant Physiology and Biochemistry, 2015, 90, 64-74.	2.8	88
26	Photosynthetic down-regulation in N2-fixing alfalfa under elevated CO2 alters rubisco content and decreases nodule metabolism via nitrogenase and tricarboxylic acid cycle. Acta Physiologiae Plantarum, 2014, 36, 2607-2617.	1.0	6
27	New Insights into the Regulation of Aquaporins by the Arbuscular Mycorrhizal Symbiosis in Maize Plants Under Drought Stress and Possible Implications for Plant Performance. Molecular Plant-Microbe Interactions, 2014, 27, 349-363.	1.4	206
28	Enhancement of root hydraulic conductivity by methyl jasmonate and the role of calcium and abscisic acid in this process. Plant, Cell and Environment, 2014, 37, 995-1008.	2.8	88
29	Photosynthetic and Molecular Markers of CO₂â€mediated Photosynthetic Downregulation in Nodulated Alfalfa. Journal of Integrative Plant Biology, 2013, 55, 721-734.	4.1	31
30	Importance of native arbuscular mycorrhizal inoculation in the halophyte Asteriscus maritimus for successful establishment and growth under saline conditions. Plant and Soil, 2013, 370, 175-185.	1.8	43
31	A native Glomus intraradices strain from a Mediterranean saline area exhibits salt tolerance and enhanced symbiotic efficiency with maize plants under salt stress conditions. Plant and Soil, 2013, 366, 333-349.	1.8	63
32	Diversity of arbuscular mycorrhizal fungi in the rhizosphere of Asteriscus maritimus (L.) Less., a representative plant species in arid and saline Mediterranean ecosystems. Journal of Arid Environments, 2013, 97, 170-175.	1.2	39
33	Arbuscular mycorrhizal symbiosis influences strigolactone production under salinity and alleviates salt stress in lettuce plants. Journal of Plant Physiology, 2013, 170, 47-55.	1.6	299
34	Arbuscular mycorrhizal fungi native from a <scp>M</scp>editerranean saline area enhance maize tolerance to salinity through improved ion homeostasis. Plant, Cell and Environment, 2013, 36, 1771-1782.	2.8	195
35	Native arbuscular mycorrhizal fungi isolated from a saline habitat improved maize antioxidant systems and plant tolerance to salinity. Plant Science, 2013, 201-202, 42-51.	1.7	155
36	<i>Diversispora clara</i> (<i>Glomeromycetes</i>)â€" a new species from saline dunes in the Natural Park Cabo de Gata (Spain). Mycotaxon, 2012, 118, 73-81.	0.1	8

#	Article	IF	Citations
37	The Aquaporin <i>TcAQP1</i> of the Desert Truffle <i>Terfezia claveryi</i> Is a Membrane Pore for Water and CO₂ Transport. Molecular Plant-Microbe Interactions, 2012, 25, 259-266.	1.4	33
38	Plant potassium content modifies the effects of arbuscular mycorrhizal symbiosis on root hydraulic properties in maize plants. Mycorrhiza, 2012, 22, 555-564.	1.3	50
39	Regulation by arbuscular mycorrhizae of the integrated physiological response to salinity in plants: new challenges in physiological and molecular studies. Journal of Experimental Botany, 2012, 63, 4033-4044.	2.4	435
40	Regulation of root water uptake under abiotic stress conditions. Journal of Experimental Botany, 2012, 63, 43-57.	2.4	487
41	Regulation of Root Water Uptake Under Drought Stress Conditions. , 2012, , 113-127.		13
42	Contribution of Arbuscular Mycorrhizal Symbiosis to Plant Drought Tolerance: State of the Art. , 2012, , 335-362.		33
43	Arbuscular mycorrhizal symbiosis increases relative apoplastic water flow in roots of the host plant under both well-watered and drought stress conditions. Annals of Botany, 2012, 109, 1009-1017.	1.4	220
44	Microbial enhancement of crop resource use efficiency. Current Opinion in Biotechnology, 2012, 23, 236-242.	3.3	108
45	Salinity stress alleviation using arbuscular mycorrhizal fungi. A review. Agronomy for Sustainable Development, 2012, 32, 181-200.	2.2	521
46	Azospirillum and arbuscular mycorrhizal colonization enhance rice growth and physiological traits under well-watered and drought conditions. Journal of Plant Physiology, 2011, 168, 1031-1037.	1.6	181
47	The application of a treated sugar beet waste residue to soil modifies the responses of mycorrhizal and non mycorrhizal lettuce plants to drought stress. Plant and Soil, 2011, 346, 153-166.	1.8	19
48	Brevibacillus, Arbuscular Mycorrhizae and Remediation of Metal Toxicity in Agricultural Soils. Soil Biology, 2011, , 235-258.	0.6	5
49	Regulation of plasma membrane aquaporins by inoculation with a Bacillus megaterium strain in maize (Zea mays L.) plants under unstressed and salt-stressed conditions. Planta, 2010, 232, 533-543.	1.6	224
50	Host Response to Osmotic Stresses: Stomatal Behaviour and Water Use Efficiency of Arbuscular Mycorrhizal Plants. , 2010, , 239-256.		51
51	The arbuscular mycorrhizal symbiosis enhances the photosynthetic efficiency and the antioxidative response of rice plants subjected to drought stress. Journal of Plant Physiology, 2010, 167, 862-869.	1.6	247
52	Modulation of Aquaporin Genes by the Arbuscular Mycorrhizal Symbiosis in Relation to Osmotic Stress Tolerance. Cellular Origin and Life in Extreme Habitats, 2010, , 357-374.	0.3	28
53	Expression Analysis of the First Arbuscular Mycorrhizal Fungi Aquaporin Described Reveals Concerted Gene Expression Between Salt-Stressed and Nonstressed Mycelium. Molecular Plant-Microbe Interactions, 2009, 22, 1169-1178.	1.4	105
54	Exogenous ABA accentuates the differences in root hydraulic properties between mycorrhizal and non mycorrhizal maize plants through regulation of PIP aquaporins. Plant Molecular Biology, 2009, 70, 565-579.	2.0	95

#	ARTICLE	IF	CITATIONS
55	Hydrogen peroxide effects on root hydraulic properties and plasma membrane aquaporin regulation in Phaseolus vulgaris. Plant Molecular Biology, 2009, 70, 647-661.	2.0	68
56	Antioxidant activities and metal acquisition in mycorrhizal plants growing in a heavy-metal multicontaminated soil amended with treated lignocellulosic agrowaste. Applied Soil Ecology, 2009, 41, 168-177.	2.1	81
57	Influence of Salinity on the In Vitro Development of Glomus intraradices and on the In Vivo Physiological and Molecular Responses of Mycorrhizal Lettuce Plants. Microbial Ecology, 2008, 55, 45-53.	1.4	298
58	Plant Responses to Drought Stress and Exogenous ABA Application are Modulated Differently by Mycorrhization in Tomato and an ABA-deficient Mutant (Sitiens). Microbial Ecology, 2008, 56, 704-719.	1.4	111
59	Differential Effects of a Bacillus megaterium Strain on Lactuca sativa Plant Growth Depending on the Origin of the Arbuscular Mycorrhizal Fungus Coinoculated: Physiologic and Biochemical Traits. Journal of Plant Growth Regulation, 2008, 27, 10-18.	2.8	75
60	Evaluation of the Possible Participation of Drought-induced Genes in the Enhanced Tolerance of Arbuscular Mycorrhizal Plants to Water Deficit. , 2008, , 185-205.		16
61	Mycorrhizal and non-mycorrhizal Lactuca sativa plants exhibit contrasting responses to exogenous ABA during drought stress and recovery. Journal of Experimental Botany, 2008, 59, 2029-2041.	2.4	200
62	How does arbuscular mycorrhizal symbiosis regulate root hydraulic properties and plasma membrane aquaporins in Phaseolus vulgaris under drought, cold or salinity stresses?. New Phytologist, 2007, 173, 808-816.	3.5	382
63	A gene from the arbuscular mycorrhizal fungus Glomus intraradices encoding a binding protein is up-regulated by drought stress in some mycorrhizal plants. Environmental and Experimental Botany, 2007, 60, 251-256.	2.0	33
64	Two bacterial strains isolated from a Zn-polluted soil enhance plant growth and mycorrhizal efficiency under Zn-toxicity. Chemosphere, 2006, 62, 1523-1533.	4.2	176
65	Does the enhanced tolerance of arbuscular mycorrhizal plants to water deficit involve modulation of droughtâ€induced plant genes?. New Phytologist, 2006, 171, 693-698.	3.5	89
66	PIP Aquaporin Gene Expression in Arbuscular Mycorrhizal GlycineÂmax and Lactuca Âsativa Plants in Relation to Drought Stress Tolerance. Plant Molecular Biology, 2006, 60, 389-404.	2.0	212
67	Identification of a Gene from the Arbuscular Mycorrhizal Fungus Glomus intraradices Encoding for a 14-3-3 Protein that is Up-Regulated by Drought Stress during the AM Symbiosis. Microbial Ecology, 2006, 52, 575-582.	1.4	56
68	Impairment of NtAQP1 gene expression in tobacco plants does not affect root colonisation pattern by arbuscular mycorrhizal fungi but decreases their symbiotic efficiency under drought. Mycorrhiza, 2005, 15, 417-423.	1.3	41
69	Evaluation of the role of genes encoding for dehydrin proteins (LEA D-11) during drought stress in arbuscular mycorrhizal Glycine max and Lactuca sativa plants. Journal of Experimental Botany, 2005, 56, 1933-1942.	2.4	61
70	Arbuscular mycorrhizal influence on leaf water potential, solute accumulation, and oxidative stress in soybean plants subjected to drought stress. Journal of Experimental Botany, 2004, 55, 1743-1750.	2.4	441
71	Evaluation of the role of genes encoding for Î"1-pyrroline-5-carboxylate synthetase (P5CS) during drought stress in arbuscular mycorrhizal Glycine max and Lactuca sativa plants. Physiological and Molecular Plant Pathology, 2004, 65, 211-221.	1.3	73
72	Influence of a Bacillus sp. on physiological activities of two arbuscular mycorrhizal fungi and on plant responses to PEG-induced drought stress. Mycorrhiza, 2003, 13, 249-256.	1.3	145

#	Article	IF	Citations
73	Arbuscular mycorrhizal symbiosis and alleviation of osmotic stress. New perspectives for molecular studies. Mycorrhiza, 2003, 13, 309-317.	1.3	503
74	Contribution of six arbuscular mycorrhizal fungal isolates to water uptake by Lactuca sativa plants under drought stress. Physiologia Plantarum, 2003, 119, 526-533.	2.6	242
75	Antioxidant activities in mycorrhizal soybean plants under drought stress and their possible relationship to the process of nodule senescence. New Phytologist, 2003, 157, 135-143.	3.5	219
76	Influence of bacterial strains isolated from lead-polluted soil and their interactions with arbuscular mycorrhizae on the growth of Trifolium pratense L. under lead toxicity. Canadian Journal of Microbiology, 2003, 49, 577-588.	0.8	113
77	Beneficial effects of indigenous Cd-tolerant and Cd-sensitive Glomus mosseae associated with a Cd-adapted strain of Brevibacillus sp. in improving plant tolerance to Cd contamination. Applied Soil Ecology, 2003, 24, 177-186.	2.1	92
78	Arbuscular mycorrhizal symbiosis can alleviate drought-induced nodule senescence in soybean plants. New Phytologist, 2001, 151, 493-502.	3.5	151
79	Title is missing!. Plant Growth Regulation, 2001, 34, 347-352.	1.8	10
80	Cloning of cDNAs encoding SODs from lettuce plants which show differential regulation by arbuscular mycorrhizal symbiosis and by drought stress. Journal of Experimental Botany, 2001, 52, 2241-2242.	2.4	62
81	Differential contribution of arbuscular mycorrhizal fungi to plant nitrate uptake (¹⁵N) under increasing N supply to the soil. Canadian Journal of Botany, 2001, 79, 1175-1180.	1.2	48
82	Mycorrhizal colonization and drought stress affect Î”13 C in CO2 -labeled lettuce plants. Physiologia Plantarum, 2000, 109, 268-273.	2.6	2
83	A Burkholderia Strain Living Inside the Arbuscular Mycorrhizal Fungus Gigaspora margarita Possesses the vacB Gene, Which Is Involved in Host Cell Colonization by Bacteria. Microbial Ecology, 2000, 39, 137-144.	1.4	53
84	Symbiotic efficiency and infectivity of an autochthonous arbuscular mycorrhizal Glomus sp. from saline soils and Glomus deserticola under salinity. Mycorrhiza, 2000, 10, 137-143.	1.3	209
85	Genes involved in resistance to powdery mildew in barley differentially modulate root colonization by the mycorrhizal fungus Glomus mosseae. Mycorrhiza, 1999, 9, 237-240.	1.3	48
86	Plant Î´15N associated with arbuscular mycorrhization, drought and nitrogen deficiency. , 1999, 13, 1320-1324.		36
87	Identification of a Putative P-Transporter Operon in the Genome of a Burkholderia Strain Living inside the Arbuscular Mycorrhizal Fungus Gigaspora margarita. Journal of Bacteriology, 1999, 181, 4106-4109.	1.0	46
88	Viability and infectivity of mycorrhizal spores after long term storage in soils with different water potentials. Applied Soil Ecology, 1996, 3, 183-186.	2.1	17
89	Mycorrhizal colonization and drought stress as factors affecting nitrate reductase activity in lettuce plants. Agriculture, Ecosystems and Environment, 1996, 60, 175-181.	2.5	87
90	Superoxide dismutase activity in arbuscular mycorrhizal Lactuca sativa plants subjected to drought stress. New Phytologist, 1996, 134, 327-333.	3.5	123

#	Article	IF	Citations
91	Alleviation of salt stress by arbuscular-mycorrhizal Glomus species in Lactuca sativa plants. Physiologia Plantarum, 1996, 98, 767-772.	2.6	195
92	Influence of different Glomus species on the time-course of physiological plant responses of lettuce to progressive drought stress periods. Plant Science, 1995, 110, 37-44.	1.7	76
93	Hyphal contribution to water uptake in mycorrhizal plants as affected by the fungal species and water status. Physiologia Plantarum, 1995, 95, 472-478.	2.6	27
94	Effects of arbuscular-mycorrhizal glomus species on drought tolerance: physiological and nutritional plant responses. Applied and Environmental Microbiology, 1995, 61, 456-460.	1.4	270
95	Categorization of the water status of rice inoculated with arbuscular mycorrhizae and with water deficit. Agronomy Mesoamerican, 0, , 339-355.	0.1	2