Jose Antonio Hernandez

List of Publications by Year
in descending order

126 papers	10,987 citations	46918 47 h-index	30848 102 g-index
131 all docs	131 docs citations	131 times ranked	8936 citing authors

#	Article	IF	Citations
1	Plant Responses to Salt Stress: Adaptive Mechanisms. Agronomy, 2017, 7, 18.	1.3	872
2	Evidence for the Presence of the Ascorbate-Glutathione Cycle in Mitochondria and Peroxisomes of Pea Leaves. Plant Physiology, 1997, 114, 275-284.	2.3	758
3	Tolerance of pea (Pisum sativum L.) to longâ€term salt stress is associated with induction of antioxidant defences. Plant, Cell and Environment, 2000, 23, 853-862.	2.8	720
4	Antioxidant Systems and O2 Â.âˆ'/H2O2 Production in the Apoplast of Pea Leaves. Its Relation with Salt-Induced Necrotic Lesions in Minor Veins. Plant Physiology, 2001, 127, 817-831.	2.3	624
5	Salt-induced oxidative stress in chloroplasts of pea plants. Plant Science, 1995, 105, 151-167.	1.7	579
6	Short-term effects of salt stress on antioxidant systems and leaf water relations of pea leaves. Physiologia Plantarum, 2002, 115, 251-257.	2.6	383
7	The Activated Oxygen Role of Peroxisomes in Senescence1. Plant Physiology, 1998, 116, 1195-1200.	2.3	354
8	Salt-induced oxidative stress mediated by activated oxygen species in pea leaf mitochondria. Physiologia Plantarum, 1993, 89, 103-110.	2.6	342
9	Induction of antioxidant enzymes is involved in the greater effectiveness of a PGPR versus AM fungi with respect to increasing the tolerance of lettuce to severe salt stress. Environmental and Experimental Botany, 2009, 65, 245-252.	2.0	328
10	Role of the Ascorbate-Glutathione Cycle of Mitochondria and Peroxisomes in the Senescence of Pea Leaves. Plant Physiology, 1998, 118, 1327-1335.	2.3	318
11	Plant-growth-promoting rhizobacteria and arbuscular mycorrhizal fungi modify alleviation biochemical mechanisms in water-stressed plants. Functional Plant Biology, 2008, 35, 141.	1.1	294
12	Response of antioxidant systems and leaf water relations to NaCl stress in pea plants. New Phytologist, 1999, 141, 241-251.	3.5	234
13	Involvement of cytosolic ascorbate peroxidase and Cu/Zn-superoxide dismutase for improved tolerance against drought stress. Journal of Experimental Botany, 2011, 62, 2599-2613.	2.4	227
14	Differential Response of Antioxidative Enzymes of Chloroplasts and Mitochondria to Long-term NaCl Stress of Pea Plants. Free Radical Research, 1999, 31, 11-18.	1.5	195
15	Alteration in the chloroplastic metabolism leads to ROS accumulation in pea plants in response to plum pox virus. Journal of Experimental Botany, 2008, 59, 2147-2160.	2.4	189
16	Interaction between hydrogen peroxide and plant hormones during germination and the early growth of pea seedlings. Plant, Cell and Environment, 2010, 33, 981-994.	2.8	182
17	Understanding the role of H₂O₂ during pea seed germination: a combined proteomic and hormone profiling approach. Plant, Cell and Environment, 2011, 34, 1907-1919.	2.8	173
18	The apoplastic antioxidant system in Prunus: response to long-term plum pox virus infection. Journal of Experimental Botany, 2006, 57, 3813-3824.	2.4	172

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19	Ectopic expression of cytosolic superoxide dismutase and ascorbate peroxidase leads to salt stress tolerance in transgenic plums. Plant Biotechnology Journal, 2013, 11, 976-985.	4.1	122
20	Physiological and biochemical mechanisms of the ornamental Eugenia myrtifolia L. plants for coping with NaCl stress and recovery. Planta, 2015, 242, 829-846.	1.6	120
21	Salinity Tolerance in Plants: Trends and Perspectives. International Journal of Molecular Sciences, 2019, 20, 2408.	1.8	119
22	Antioxidant enzyme activities in shoots from three mycorrhizal shrub species afforested in a degraded semi-arid soil. Physiologia Plantarum, 2003, 118, 562-570.	2.6	115
23	Oxidative stress induced by long-term plum pox virus infection in peach (Prunus persica). Physiologia Plantarum, 2004, 122, 486-495.	2.6	103
24	NaCl-induced physiological and biochemical adaptative mechanisms in the ornamental Myrtus communis L. plants. Journal of Plant Physiology, 2015, 183, 41-51.	1.6	101
25	Induction of Several Antioxidant Enzymes in the Selection of a Salt-Tolerant Cell Line of Pisum sativum. Journal of Plant Physiology, 1994, 144, 594-598.	1.6	99
26	Elucidating hormonal/ROS networks during seed germination: insights and perspectives. Plant Cell Reports, 2013, 32, 1491-1502.	2.8	99
27	Effects of salt on lipid peroxidation and antioxidant enzyme activities of Catharanthus roseus suspension cells. Plant Science, 2005, 168, 607-613.	1.7	96
28	Metabolism of Activated Oxygen in Peroxisomes from two Pisum sativum L. Cultivars with Different Sensitivity to Sodium Chloride. Journal of Plant Physiology, 1993, 141, 160-165.	1.6	92
29	Oxidative stress and antioxidative responses in plantâ€"virus interactions. Physiological and Molecular Plant Pathology, 2016, 94, 134-148.	1.3	88
30	Role of antioxidant enzymatic defences against oxidative stress (H2O2) and the acquisition of oxidative tolerance inCandida albicans. Yeast, 2003, 20, 1161-1169.	0.8	87
31	Salt stress-induced changes in superoxide dismutase isozymes in leaves and mesophyll protoplasts fromVigna unguiculata(L.) Walp.. New Phytologist, 1994, 126, 37-44.	3.5	86
32	Long-term plum pox virus infection produces an oxidative stress in a susceptible apricot, Prunus armeniaca, cultivar but not in a resistant cultivar. Physiologia Plantarum, 2006, 126, 140-152.	2.6	80
33	The effect of calcium on the antioxidant enzymes from salt-treated loquat and anger plants. Functional Plant Biology, 2003, 30, 1127.	1.1	78
34	Role of H₂O₂in pea seed germination. Plant Signaling and Behavior, 2012, 7, 193-195.	1.2	78
35	Ectopic overexpression of the cell wall invertase gene CIN1 leads to dehydration avoidance in tomato. Journal of Experimental Botany, 2015, 66, 863-878.	2.4	75
36	Structure and expression of three genes encoding ACC oxidase homologs from melon (Cucumis melo) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.4	72

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37	Involvement of antioxidant enzyme and nitrate reductase activities during water stress and recovery of mycorrhizal Myrtus communis and Phillyrea angustifolia plants. Plant Science, 2005, 169, 191-197.	1.7	72
38	Antioxidant enzyme activities and hormonal status inÂresponse to Cd stress in the wetland halophyte <i>Kosteletzkya virginica</i> under saline conditions. Physiologia Plantarum, 2013, 147, 352-368.	2.6	72
39	Salicylic acid negatively affects the response to salt stress in pea plants. Plant Biology, 2011, 13, 909-917.	1.8	68
40	Salt-tolerance mechanisms induced in Stevia rebaudiana Bertoni: Effects on mineral nutrition, antioxidative metabolism and steviol glycoside content. Plant Physiology and Biochemistry, 2017, 115, 484-496.	2.8	68
41	Effect of rootstocks grafting and boron on the antioxidant systems and salinity tolerance of loquat plants (Eriobotrya japonica Lindl.). Environmental and Experimental Botany, 2007, 60, 151-158.	2.0	64
42	The apoplastic antioxidant system and altered cell wall dynamics influence mesophyll conductance and the rate of photosynthesis. Plant Journal, 2019, 99, 1031-1046.	2.8	60
43	Enhanced salt-induced antioxidative responses involve a contribution of polyamine biosynthesis in grapevine plants. Journal of Plant Physiology, 2014, 171, 779-788.	1.6	59
44	Response of antioxidative enzymes to plum pox virus in two apricot cultivars. Physiologia Plantarum, 2001, 111, 313-321.	2.6	58
45	Somatic embryogenesis in saffron (Crocus sativus L.). Histological differentiation and implication of some components of the antioxidant enzymatic system. Plant Cell, Tissue and Organ Culture, 2009, 97, 49-57.	1.2	56
46	The apoplastic antioxidant enzymatic system in the wood-forming tissues of trees. Trees - Structure and Function, 2006, 20, 145-156.	0.9	54
47	Changes in antioxidant enzymes and organic solutes associated with adaptation of citrus cells to salt stress. Plant Cell, Tissue and Organ Culture, 1996, 45, 53-60.	1.2	50
48	Differential activation of two ACC oxidase gene promoters from melon during plant development and in response to pathogen attack. Molecular Genetics and Genomics, 1997, 256, 211-222.	2.4	49
49	Role of hydrogen peroxide and the redox state of ascorbate in the induction of antioxidant enzymes in pea leaves under excess light stress. Functional Plant Biology, 2004, 31, 359.	1.1	48
50	Mitochondrial and peroxisomal ascorbate peroxidase of pea leaves. Physiologia Plantarum, 1998, 104, 687-692.	2.6	47
51	Superoxide dismutase and total peroxidase activities in relation to drought recovery performance of mycorrhizal shrub seedlings grown in an amended semiarid soil. Journal of Plant Physiology, 2008, 165, 715-722.	1.6	46
52	Modulation of tobacco bacterial disease resistance using cytosolic ascorbate peroxidase and Cu,Znâ€superoxide dismutase. Plant Pathology, 2012, 61, 858-866.	1.2	46
53	The long-term resistance mechanisms, critical irrigation threshold and relief capacity shown by Eugenia myrtifolia plants in response to saline reclaimed water. Plant Physiology and Biochemistry, 2017, 111, 244-256.	2.8	45
54	Antioxidant Systems and O2.-/H2O2 Production in the Apoplast of Pea Leaves. Its Relation with Salt-Induced Necrotic Lesions in Minor Veins. Plant Physiology, 2001, 127, 817-831.	2.3	43

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55	Chloroplast protection in plum pox virusâ€infected peach plants by Lâ€2â€oxoâ€4â€thiazolidineâ€carboxylic acid treatments: effect in the proteome. Plant, Cell and Environment, 2013, 36, 640-654.	2.8	43
56	Sharka: how do plants respond to Plum pox virus infection?. Journal of Experimental Botany, 2015, 66, 25-35.	2.4	41
57	Towards a Sustainable Agriculture: Strategies Involving Phytoprotectants against Salt Stress. Agronomy, 2020, 10, 194.	1.3	41
58	Effect of Arbuscular Mycorrhizae and Induced Drought Stress on Antioxidant Enzyme and Nitrate Reductase Activities in Juniperus oxycedrus L. Grown in a Composted Sewage Sludge-amended Semi-arid Soil. Plant and Soil, 2006, 279, 209-218.	1.8	37
59	Salts and nutrients present in regenerated waters induce changes in water relations, antioxidative metabolism, ion accumulation and restricted ion uptake in Myrtus communis L. plants. Plant Physiology and Biochemistry, 2014, 85, 41-50.	2.8	37
60	ROS formation is a differential contributory factor to the fungicidal action of Amphotericin B and Micafungin in Candida albicans. International Journal of Medical Microbiology, 2017, 307, 241-248.	1.5	36
61	Benzothiadiazole and l-2-oxothiazolidine-4-carboxylic acid reduce the severity of Sharka symptoms in pea leaves: effect on antioxidative metabolism at the subcellular level. Plant Biology, 2010, 12, 88-97.	1.8	34
62	Cu/Zn superoxide dismutase and ascorbate peroxidase enhance in vitro shoot multiplication in transgenic plum. Journal of Plant Physiology, 2013, 170, 625-632.	1.6	33
63	Metabolomics and Biochemical Approaches Link Salicylic Acid Biosynthesis to Cyanogenesis in Peach Plants. Plant and Cell Physiology, 2017, 58, 2057-2066.	1.5	32
64	Glutathione-Mediated Biotic Stress Tolerance in Plants. , 2017, , 309-329.		32
65	Subcellular distribution of superoxide dismutase in leaves of ureide-producing leguminous plants. Physiologia Plantarum, 1991, 82, 285-291.	2.6	31
66	Characterization of the antioxidant system during the vegetative development of pea plants. Biologia Plantarum, 2010, 54, 76-82.	1.9	31
67	Effect of Salt Stress on the Superoxide Dismutase Activity in Leaves of Citrus limonum in Different Rootstock-Scion Combinations. Biologia Plantarum, 2002, 45, 545-549.	1.9	30
68	Role of thioproline on seed germination: Interaction ROS-ABA and effects on antioxidative metabolism. Plant Physiology and Biochemistry, 2012, 59, 30-36.	2.8	30
69	Effectiveness and persistence of arbuscular mycorrhizal fungi on the physiology, nutrient uptake and yield of Crimson seedless grapevine. Journal of Agricultural Science, 2015, 153, 1084-1096.	0.6	28
70	Plant growth stimulation in Prunus species plantlets by BTH or OTC treatments under in vitro conditions. Journal of Plant Physiology, 2012, 169, 1074-1083.	1.6	27
71	Study of the antioxidant enzymatic system during shoot development from cultured intercalar meristems of saffron. Plant Growth Regulation, 2011, 65, 119-126.	1.8	26
72	Modeling the ascorbate-glutathione cycle in chloroplasts under light/dark conditions. BMC Systems Biology, 2015, 10, 11.	3.0	26

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73	Physiological and biochemical characterization of bud dormancy: Evolution of carbohydrate and antioxidant metabolisms and hormonal profile in a low chill peach variety. Scientia Horticulturae, 2021, 281, 109957.	1.7	26
74	Breaking seed dormancy in long-term stored seeds from Iranian wild almond species. Seed Science and Technology, 2009, 37, 267-275.	0.6	24
75	Oxidative stress induced in tobacco leaves by chloroplast over-expression of maize plastidial transglutaminase. Planta, 2010, 232, 593-605.	1.6	24
76	Modified atmosphere generated during storage under light conditions is the main factor responsible for the quality changes of baby spinach. Postharvest Biology and Technology, 2016, 114, 45-53.	2.9	23
77	Nitrate- and nitric oxide-induced plant growth in pea seedlings is linked to antioxidative metabolism and the ABA/GA balance. Journal of Plant Physiology, 2018, 230, 13-20.	1.6	23
78	<i>Trichoderma harzianum</i> Tâ€78 supplementation of compost stimulates the antioxidant defence system in melon plants. Journal of the Science of Food and Agriculture, 2015, 95, 2208-2214.	1.7	22
79	Irrigation of<i>Myrtus communis</i>plants with reclaimed water: morphological and physiological responses to different levels of salinity. Journal of Horticultural Science and Biotechnology, 2014, 89, 487-494.	0.9	21
80	Transformation of plum plants with a cytosolic ascorbate peroxidase transgene leads to enhanced water stress tolerance. Annals of Botany, 2016, 117, 1121-1131.	1.4	21
81	Mycorrhizal inoculation on compost substrate affects nutritional balance, water uptake and photosynthetic efficiency in Cistus albidus plants submitted to water stress. Revista Brasileira De Botanica, 2018, 41, 299-310.	0.5	21
82	Antioxidant enzyme induction in pea plants under high irradiance. Biologia Plantarum, 2006, 50, 395-399.	1.9	20
83	Oxidative stress induction by<i> Prunus necrotic ringspot virus </i>infection in apricot seeds. Physiologia Plantarum, 2007, 131, 302-310.	2.6	19
84	Interplay among Antioxidant System, Hormone Profile and Carbohydrate Metabolism during Bud Dormancy Breaking in a High-Chill Peach Variety. Antioxidants, 2021, 10, 560.	2.2	19
85	Halophyte based Mediterranean agriculture in the contexts of food insecurity and global climate change. Environmental and Experimental Botany, 2021, 191, 104601.	2.0	18
86	On the Role of Salicylic Acid in Plant Responses to Environmental Stresses. , 2017, , 17-34.		18
87	Effect of salinity on metalloenzymes of oxygen metabolism in two leguminous plants. Journal of Plant Nutrition, 1993, 16, 2539-2554.	0.9	16
88	l-Galactono-Î³-Lactone Dehydrogenase Activity and Vitamin C Content in Fresh-Cut Potatoes Stored under Controlled Atmospheres. Journal of Agricultural and Food Chemistry, 2003, 51, 4296-4302.	2.4	16
89	Correlation between the intracellular content of glutathione and the formation of germ-tubes induced by human serum in Candida albicans. Biochimica Et Biophysica Acta - General Subjects, 2005, 1722, 324-330.	1.1	16
90	A new prognostic model identifies patients aged 80 years and older with diffuse large Bâ€cell lymphoma who may benefit from curative treatment: A multicenter, retrospective analysis by the Spanish GELTAMO group. American Journal of Hematology, 2018, 93, 867-873.	2.0	16

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91	The Apoplastic and Symplastic Antioxidant System in Onion: Response to Long-Term Salt Stress. Antioxidants, 2020, 9, 67.	2.2	16
92	Antioxidant Metabolism and Chlorophyll Fluorescence during the Acclimatisation to Ex Vitro Conditions of Micropropagated Stevia rebaudiana Bertoni Plants. Antioxidants, 2019, 8, 615.	2.2	15
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109	Acetylsalicylic acid improved antioxidative status and cold storage of encapsulated nodal segments of neem (Azadirachta indica A. Juss.). Plant Cell, Tissue and Organ Culture, 2021, 144, 261-270.	1.2	8
110	Changes in the antioxidative metabolism induced by Apple chlorotic leaf spot virus infection in peach [Prunus persica (L.) Batsch]. Environmental and Experimental Botany, 2011, 70, 277-282.	2.0	7
111	<i>Plum pox virus</i>(PPV) infection produces an imbalance on the antioxidative systems in<i>Prunus</i>species. Acta Phytopathologica Et Entomologica Hungarica, 2007, 42, 209-221.	0.1	7
112	Plant Responses to Salinity Through an Antioxidative Metabolism and Proteomic Point of View. , 2017, , 173-200.		6
113	Substrate composition affects the development of water stress and subsequent recovery by inducing physiological changes in Cistus albidus plants. Plant Physiology and Biochemistry, 2021, 158, 125-135.	2.8	6
114	Cr (III) Removal Capacity in Aqueous Solution in Relation to the Functional Groups Present in the Orange Peel (Citrus sinensis). Applied Sciences (Switzerland), 2021, 11, 6346.	1.3	6
115	Subcellular distribution of superoxide dismutase in leaves of ureide-producing leguminous plants. Physiologia Plantarum, 1991, 82, 285-291.	2.6	5
116	H2O2-Elicitation of Black Carrot Hairy Roots Induces a Controlled Oxidative Burst Leading to Increased Anthocyanin Production. Plants, 2021, 10, 2753.	1.6	5
117	Seed Science Research: Global Trends in Seed Biology and Technology. Seeds, 2022, 1, 1-4.	0.7	4
118	Active oxygen metabolism in the senescence of pea leaves: ascorbate and glutathione contents in different cell compartments. Biochemical Society Transactions, 1996, 24, 198S-198S.	1.6	3
119	The cellular resistance against oxidative stress (H2O2) is independent of neutral trehalase (Ntc1p) activity in Candida albicans. FEMS Yeast Research, 2006, 6, 319-319.	1.1	3
120	The use of reclaimed water is a viable and safe strategy for the irrigation of myrtle plants in a scenario of climate change. Water Science and Technology: Water Supply, 2019, 19, 1741-1747.	1.0	2
121	Molecular characterization using SSR markers and biochemical analysis of Moroccan and Spanish argan [Argania spinosa (L.) Skeels] ecotypes under water stress and rewatering. Biologia (Poland), 2021, 76, 799-808.	0.8	2
122	Development of molecular markers linkaged to Sharka (<i>Plum pox virus</i>, PPV) resistance in<i>Prunus</i>. Acta Phytopathologica Et Entomologica Hungarica, 2007, 42, 223-233.	0.1	1
123	Where biotic and abiotic stress responses converge: Common patterns in response to salinity and Plum pox virus infection in pea and peach plants. Annals of Applied Biology, 2021, 178, 281-292.	1.3	1
124	GammapatÃas biclonales: Â¿un significado clÃnico diferente?. Revista Clinica Espanola, 2015, 215, 31-32.	0.2	0
125	Hydrogen Peroxide Imbibition Following Cold Stratification Promotes Seed Germination Rate and Uniformity in Peach cv. GF305. Seeds, 2022, 1, 28-35.	0.7	0
126	Basic Integration of Artificial Intelligence of a Plant Experimentation Chamber with LEDs and Sensors through Connection to the IoT with Node-RED and Securing Access to Data. , 0, , .		0