## Ricardo Antunes Azevedo

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1108501/publications.pdf

Version: 2024-02-01

250 papers

10,979 citations

51 h-index 40979

g-index

253 all docs 253 docs citations

times ranked

253

8881 citing authors

#	Article	IF	CITATIONS
1	Making the life of heavy metal-stressed plants a little easier. Functional Plant Biology, 2005, 32, 481.	2.1	933
2	Response of antioxidant enzymes to transfer from elevated carbon dioxide to air and ozone fumigation, in the leaves and roots of wildâ€ŧype and a catalaseâ€deficient mutant of barley. Physiologia Plantarum, 1998, 104, 280-292.	5.2	452
3	Antioxidant enzymes responses to cadmium in radish tissues. Phytochemistry, 2001, 57, 701-710.	2.9	362
4	Plants facing oxidative challenges—A little help from the antioxidant networks. Environmental and Experimental Botany, 2019, 161, 4-25.	4.2	277
5	Nanoparticles applied to plant science: A review. Talanta, 2015, 131, 693-705.	<b>5.</b> 5	272
6	The aspartic acid metabolic pathway, an exciting and essential pathway in plants. Amino Acids, 2006, 30, 143-162.	2.7	233
7	Activity of antioxidant enzymes in response to cadmium in Crotalaria juncea. Plant and Soil, 2002, 239, 123-132.	3.7	213
8	Nitrogen use efficiency. 1. Uptake of nitrogen from the soil. Annals of Applied Biology, 2006, 149, 243-247.	2.5	189
9	The biosynthesis and metabolism of the aspartate derived amino acids in higher plants. Phytochemistry, 1997, 46, 395-419.	2.9	178
10	Effect of 24-epibrassinolide on ROS content, antioxidant system, lipid peroxidation and Ni uptake in Solanum nigrum L. under Ni stress. Environmental and Experimental Botany, 2016, 122, 115-125.	4.2	175
11	Acquired tolerance of tomato ( <i>Lycopersicon esculentum </i> cv. Microâ€Tom) plants to cadmiumâ€induced stress. Annals of Applied Biology, 2008, 153, 321-333.	2.5	173
12	Phytoremediation: green technology for the clean up of toxic metals in the environment. Brazilian Journal of Plant Physiology, 2005, 17, 53-64.	0.5	172
13	Antioxidant metabolism of coffee cell suspension cultures in response to cadmium. Chemosphere, 2006, 65, 1330-1337.	8.2	171
14	Sulfur Metabolism and Stress Defense Responses in Plants. Tropical Plant Biology, 2015, 8, 60-73.	1.9	165
15	Biochemical dissection of diageotropica and Never ripe tomato mutants to Cd-stressful conditions. Plant Physiology and Biochemistry, 2012, 56, 79-96.	5 <b>.</b> 8	153
16	Water stress reveals differential antioxidant responses of tolerant and non-tolerant sugarcane genotypes. Plant Physiology and Biochemistry, 2014, 74, 165-175.	5.8	149
17	Antioxidant responses to water deficit by droughtâ€tolerant and â€sensitive sugarcane varieties. Annals of Applied Biology, 2012, 161, 313-324.	2.5	145
18	Nitrogen use efficiency. 2. Amino acid metabolism. Annals of Applied Biology, 2007, 151, 269-275.	2.5	137

#	Article	IF	CITATIONS
19	Differential ultrastructural changes in tomato hormonal mutants exposed to cadmium. Environmental and Experimental Botany, 2009, 67, 387-394.	4.2	137
20	Cadmium stress antioxidant responses and root-to-shoot communication in grafted tomato plants. BioMetals, 2015, 28, 803-816.	4.1	136
21	Hormesis in plants under Cd exposure: From toxic to beneficial element?. Journal of Hazardous Materials, 2020, 384, 121434.	12.4	131
22	Biochemical responses of the ethylene-insensitive Never ripe tomato mutant subjected to cadmium and sodium stresses. Environmental and Experimental Botany, 2011, 71, 306-320.	4.2	128
23	Effects of Cadmium on Antioxidant Enzyme Activities in Sugar Cane. Biologia Plantarum, 2002, 45, 91-97.	1.9	126
24	The influence of nitrogen supply on antioxidant enzymes in plant roots. Functional Plant Biology, 2004, 31, 1.	2.1	110
25	Biochemical and physiological changes in jack bean under mycorrhizal symbiosis growing in soil with increasing Cu concentrations. Environmental and Experimental Botany, 2010, 68, 198-207.	4.2	109
26	Ecophysiological responses of water hyacinth exposed to Cr3+ and Cr6+. Environmental and Experimental Botany, 2009, 65, 403-409.	4.2	107
27	CHANGES IN ANTIOXIDANT ENZYME ACTIVITIES IN SOYBEAN UNDER CADMIUM STRESS. Journal of Plant Nutrition, 2002, 25, 327-342.	1.9	104
28	Nickel elicits aÂfast antioxidant response inÂCoffeaÂarabica cells. Plant Physiology and Biochemistry, 2006, 44, 420-429.	5.8	100
29	Selenium-induced oxidative stress in coffee cell suspension cultures. Functional Plant Biology, 2007, 34, 449.	2.1	98
30	Plant pigments: the many faces of light perception. Acta Physiologiae Plantarum, 2011, 33, 241-248.	2.1	97
31	Zn uptake, physiological response and stress attenuation in mycorrhizal jack bean growing in soil with increasing Zn concentrations. Chemosphere, 2009, 75, 1363-1370.	8.2	94
32	Use of non-hyperaccumulator plant species for the phytoextraction of heavy metals using chelating agents. Scientia Agricola, 2013, 70, 290-295.	1.2	94
33	Cadmium stress related to root-to-shoot communication depends on ethylene and auxin in tomato plants. Environmental and Experimental Botany, 2017, 134, 102-115.	4.2	88
34	Biochemical responses of glyphosate resistant and susceptible soybean plants exposed to glyphosate. Acta Physiologiae Plantarum, 2008, 30, 469-479.	2.1	87
35	The Role of Phytochrome in Stress Tolerance. Journal of Integrative Plant Biology, 2011, 53, 920-929.	8.5	83
36	Lysine metabolism in higher plants. Amino Acids, 2001, 20, 261-279.	2.7	76

#	Article	IF	Citations
37	Nitrogen use efficiency. 3. Nitrogen fixation: genes and costs. Annals of Applied Biology, 2009, 155, 1-13.	2.5	74
38	Cadmium stress in sugar cane callus cultures: Effect on antioxidant enzymes. Plant Cell, Tissue and Organ Culture, 2002, 71, 125-131.	2.3	71
39	Metal Contamination Effects on Sunflower (Helianthus annuus L.) Growth and Protein Expression in Leaves During Development. Journal of Agricultural and Food Chemistry, 2006, 54, 8623-8630.	5.2	71
40	Sugarcane Under Pressure: An Overview of Biochemical and Physiological Studies of Abiotic Stress. Tropical Plant Biology, 2011, 4, 42-51.	1.9	71
41	What is new in the research on cadmiumâ€induced stress in plants?. Food and Energy Security, 2012, 1, 133-140.	4.3	69
42	Regulation of maize lysine metabolism and endosperm protein synthesis by opaque and floury mutations. FEBS Journal, 2003, 270, 4898-4908.	0.2	68
43	Cloning, expression, molecular modelling and docking analysis of glutathione transferase from Saccharum officinarum. Annals of Applied Biology, 2011, 159, 267-280.	2.5	65
44	Effects of the herbicides acetochlor and metolachlor on antioxidant enzymes in soil bacteria. Process Biochemistry, 2011, 46, 1186-1195.	3.7	64
45	Structural Changes in Radish Seedlings Exposed to Cadmium. Biologia Plantarum, 2003, 46, 561-568.	1.9	63
46	Metallomics and chemical speciation: towards a better understanding of metalâ€induced stress in plants. Annals of Applied Biology, 2009, 155, 301-307.	2.5	63
47	New insights on proteomics of transgenic soybean seeds: evaluation of differential expressions of enzymes and proteins. Analytical and Bioanalytical Chemistry, 2012, 402, 299-314.	3.7	61
48	Ultrastructural changes of radish leaf exposed to cadmium. Environmental and Experimental Botany, 2006, 58, 47-52.	4.2	60
49	Abscisic acid-deficient sit tomato mutant responses to cadmium-induced stress. Protoplasma, 2017, 254, 771-783.	2.1	58
50	The Enzymology of Lysine Catabolism in Rice Seeds - Isolation, Characterization, and Regulatory Properties of a Lysine 2-Oxoglutarate Reductase/Saccharopine Dehydrogenase Bifunctional Polypeptide. FEBS Journal, 1997, 247, 364-371.	0.2	54
51	Temporal dynamic responses of roots in contrasting tomato genotypes to cadmium tolerance. Ecotoxicology, 2018, 27, 245-258.	2.4	53
52	High-lysine maize: the key discoveries that have made it possible. Amino Acids, 2010, 39, 979-989.	2.7	52
53	Citrus rootstocks regulate the nutritional status and antioxidant system of trees under copper stress. Environmental and Experimental Botany, 2016, 130, 42-52.	4.2	52
54	Tropical soils with high aluminum concentrations cause oxidative stress in two tomato genotypes. Environmental Monitoring and Assessment, 2015, 187, 73.	2.7	51

#	Article	IF	CITATIONS
55	Differential Gene Expression Between the Biotrophic-Like and Saprotrophic Mycelia of the Witches' Broom Pathogen Moniliophthora perniciosa. Molecular Plant-Microbe Interactions, 2008, 21, 891-908.	2.6	50
56	Aspartate kinase in the maize mutants ASK1-LT19 and OPAQUE-2. Phytochemistry, 1996, 41, 707-712.	2.9	49
57	Quality Protein Maize:Â A Biochemical Study of Enzymes Involved in Lysine Metabolism. Journal of Agricultural and Food Chemistry, 1999, 47, 1268-1275.	5.2	48
58	Cadmium―and barium―oxicity effects on growth and antioxidant capacity of soybean ( <i>Glycine) Tj ETQq0 Nutrition and Soil Science, 2011, 174, 847-859.</i>	0 0 rgBT /0 1.9	Overlock 10 T 46
59	Estimating tomato tolerance to heavy metal toxicity: cadmium as study case. Environmental Science and Pollution Research, 2018, 25, 27535-27544.	5.3	46
60	Growth inhibition of the filamentous fungus Aspergillus nidulans by cadmium: an antioxidant enzyme approach. Journal of General and Applied Microbiology, 2003, 49, 63-73.	0.7	44
61	In Vitro Production of Biotrophic-Like Cultures of Crinipellis perniciosa, the Causal Agent of Witches' Broom Disease of Theobroma cacao. Current Microbiology, 2006, 52, 191-196.	2.2	43
62	Antioxidant response of Nicotiana tabacum cv. Bright Yellow 2 cells to cadmium and nickel stress. Plant Cell, Tissue and Organ Culture, 2008, 94, 73-83.	2.3	43
63	Comparative studies focusing on transgenic through cp4EPSPS gene and non-transgenic soybean plants: An analysis of protein species and enzymes. Journal of Proteomics, 2013, 93, 107-116.	2.4	43
64	Functional analysis of oxidative burst in sugarcane smut-resistant and -susceptible genotypes. Planta, 2017, 245, 749-764.	3.2	43
65	Biochemical genetics of the interaction of the lysine plus threonine resistant mutant Ltrâ $-1$ with opaque-2 maize mutant. Plant Science, 1990, 70, 81-90.	3.6	42
66	Chlorophyll a fluorescence and ultrastructural changes in chloroplast of water hyacinth as indicators of environmental stress. Environmental and Experimental Botany, 2008, 64, 307-313.	4.2	42
67	Two-dimensional difference gel electrophoresis applied for analytical proteomics: fundamentals and applications to the study of plant proteomics. Analyst, The, 2011, 136, 4119.	3.5	42
68	Three aspartate kinase isoenzymes from maize. Phytochemistry, 1992, 31, 3725-3730.	2.9	40
69	Structure and regulation of the bifunctional enzyme lysine-oxoglutarate reductase-saccharopine dehydrogenase in maize. FEBS Journal, 1998, 253, 720-729.	0.2	40
70	Nutritional status and root morphology of tomato under Cd-induced stress: Comparing contrasting genotypes for metal-tolerance. Scientia Horticulturae, 2019, 246, 518-527.	3.6	40
71	Genetic control of lysine metabolism in maize endosperm mutants. Functional Plant Biology, 2004, 31, 339.	2.1	39
72	<i>Burkholderia</i> sp. <scp>SCMS54</scp> reduces cadmium toxicity and promotes growth in tomato. Annals of Applied Biology, 2013, 163, 494-507.	2.5	39

#	Article	IF	CITATIONS
73	Oxidative stress induced by Cu nutritional disorders in Citrus depends on nitrogen and calcium availability. Scientific Reports, 2018, 8, 1641.	3.3	39
74	Differential Responses of the Antioxidant System of Ametryn and Clomazone Tolerant Bacteria. PLoS ONE, 2014, 9, e112271.	2.5	39
<b>7</b> 5	Are high-lysine cereal crops still a challenge?. Brazilian Journal of Medical and Biological Research, 2005, 38, 985-994.	1.5	38
76	Soybean leghemoglobin targeted to potato chloroplasts influences growth and development of transgenic plants. Plant Cell Reports, 2000, 19, 961-965.	5.6	37
77	Regulation of Lysine Metabolism and Endosperm Protein Synthesis by theOpaque-5andOpaque-7Maize Mutations. Journal of Agricultural and Food Chemistry, 2004, 52, 4865-4871.	5.2	37
78	Simple procedure for nutrient analysis of coffee plant with energy dispersive X-ray fluorescence spectrometry (EDXRF). Scientia Agricola, 2013, 70, 263-267.	1.2	37
79	Aspartate kinase regulation in maize: Evidence for co-purification of threonine-sensitive aspartate kinase and homoserine dehydrogenase. Phytochemistry, 1992, 31, 3731-3734.	2.9	36
80	Seed priming with hormones does not alleviate induced oxidative stress in maize seedlings subjected to salt stress. Scientia Agricola, 2011, 68, 598-602.	1.2	36
81	New insights into cadmium stressful-conditions: Role of ethylene on selenium-mediated antioxidant enzymes. Ecotoxicology and Environmental Safety, 2019, 186, 109747.	6.0	36
82	Influence of nitrate - ammonium ratio on the growth, nutrition, and metabolism of sugarcane. Plant Physiology and Biochemistry, 2019, 139, 246-255.	5.8	36
83	Coffee is highly tolerant to cadmium, nickel and zinc: Plant and soil nutritional status, metal distribution and bean yield. Field Crops Research, 2012, 125, 25-34.	5.1	35
84	Analysis of the aspartic acid metabolic pathway using mutant genes. Amino Acids, 2002, 22, 217-230.	2.7	34
85	Mechanisms of Tolerance and High Degradation Capacity of the Herbicide Mesotrione by Escherichia coli Strain DH5-α. PLoS ONE, 2014, 9, e99960.	2.5	34
86	Investigation into the relationship among Cd bioaccumulation, nutrient composition, ultrastructural changes and antioxidative metabolism in lettuce genotypes under Cd stress. Ecotoxicology and Environmental Safety, 2019, 170, 578-589.	6.0	34
87	Mechanisms of copper stress alleviation in Citrus trees after metal uptake by leaves or roots. Environmental Science and Pollution Research, 2018, 25, 13134-13146.	5.3	33
88	Cadmium exposure triggers genotype-dependent changes in seed vigor and germination of tomato offspring. Protoplasma, 2018, 255, 989-999.	2.1	33
89	Genetic variability and chromosome-length polymorphisms of the witches' broom pathogen Crinipellis perniciosa from various plant hosts in South America. Mycological Research, 2006, 110, 821-832.	2.5	31
90	Antioxidant enzymes activities of Burkholderia spp. strainsâ€"oxidative responses to Ni toxicity. Environmental Science and Pollution Research, 2015, 22, 19922-19932.	5.3	31

#	Article	IF	Citations
91	New insights about cadmium impacts on tomato: Plant acclimation, nutritional changes, fruit quality and yield. Food and Energy Security, 2018, 7, e00131.	4.3	31
92	Dealing with abiotic stresses: an integrative view of how phytohormones control abiotic stress-induced oxidative stress. Theoretical and Experimental Plant Physiology, 2017, 29, 109-127.	2.4	30
93	Relationship between Mg, B and Mn status and tomato tolerance against Cd toxicity. Journal of Environmental Management, 2019, 240, 84-92.	7.8	30
94	Biochemical and histological characterization of tomato mutants. Anais Da Academia Brasileira De Ciencias, 2012, 84, 573-585.	0.8	29
95	Towards soil management with Zn and Mn: estimates of fertilisation efficacy of <i>Citrus</i> trees. Annals of Applied Biology, 2015, 166, 484-495.	2.5	29
96	Cadmium Application in Tomato: Nutritional Imbalance and Oxidative Stress. Water, Air, and Soil Pollution, 2016, 227, 1.	2.4	28
97	Targeting of the soybean leghemoglobin to tobacco chloroplasts: effects on aerobic metabolism in transgenic plants. Plant Science, 2000, 155, 193-202.	3.6	27
98	Mechanisms of cadmium-stress avoidance by selenium in tomato plants. Ecotoxicology, 2020, 29, 594-606.	2.4	27
99	Is seaweed extract an elicitor compound? Changing proline content in drought-stressed bean plants. Comunicata Scientiae, 2018, 9, 292-297.	0.4	27
100	Diallel analysis of maize lines with contrasting responses to applied nitrogen. Journal of Agricultural Science, 2004, 142, 535-541.	1.3	26
101	Selection of microorganisms degrading S-Metolachlor herbicide. Brazilian Archives of Biology and Technology, 2007, 50, 153-159.	0.5	26
102	What about keeping plants well watered?. Environmental and Experimental Botany, 2014, 99, 38-42.	4.2	26
103	Proper supply of S increases GSH synthesis in the establishment and reduces tiller mortality during the regrowth of Tanzania guinea grass used for Cd phytoextraction. Journal of Soils and Sediments, 2017, 17, 1427-1436.	3.0	26
104	Evaluation of silicon influence on the mitigation of cadmium-stress in the development of Arabidopsis thaliana through total metal content, proteomic and enzymatic approaches. Journal of Trace Elements in Medicine and Biology, 2017, 44, 50-58.	3.0	26
105	Cadmium toxicity and its relationship with disturbances in the cytoskeleton, cell cycle and chromosome stability. Ecotoxicology, 2019, 28, 1046-1055.	2.4	26
106	Cadmium-induced transgenerational effects on tomato plants: A gift from parents to progenies. Science of the Total Environment, 2021, 789, 147885.	8.0	26
107	Burkholderia sp. SCMS54 Triggers a Global Stress Defense in Tomato Enhancing Cadmium Tolerance. Water, Air, and Soil Pollution, 2014, 225, 1.	2.4	25
108	Novel Insights Into the Early Stages of Ratoon Stunting Disease of Sugarcane Inferred from Transcript and Protein Analysis. Phytopathology, 2018, 108, 1455-1466.	2,2	25

#	Article	IF	Citations
109	Response of Crotalaria juncea to nickel exposure. Brazilian Journal of Plant Physiology, 2005, 17, 267-272.	0.5	24
110	Stomatal conductance of maize under water and nitrogen deficits. Pesquisa Agropecuaria Brasileira, 2007, 42, 599-601.	0.9	24
111	Antioxidant isoenzyme responses to nickel-induced stress in tobacco cell suspension culture. Scientia Agricola, 2008, 65, 548-552.	1.2	24
112	Automatic controller to water plants. Scientia Agricola, 2010, 67, 727-730.	1.2	24
113	Research on abiotic and biotic stress - what next?. Annals of Applied Biology, 2011, 159, 317-319.	2.5	24
114	Cadmium toxicity degree on tomato development is associated with disbalances in B and Mn status at early stages of plant exposure. Ecotoxicology, 2018, 27, 1293-1302.	2.4	24
115	The sweet side of misbalanced nutrients in cadmiumâ€stressed plants. Annals of Applied Biology, 2020, 176, 275-284.	2.5	24
116	The possible role of extra magnesium and nitrogen supply to alleviate stress caused by high irradiation and temperature in lemon trees. Plant and Soil, 2020, 457, 57-70.	3.7	24
117	Degradation of lysine in rice seeds: Effect of calcium, ionic strength, S -adenosylmethionine and S -2-aminoethyl-I -cysteine on the lysine 2-oxoglutarate reductase-saccharopine dehydrogenase bifunctional enzyme. Physiologia Plantarum, 2000, 110, 164-171.	5.2	23
118	Antioxidant metabolism in coffee (Coffea arabica L.) plants in response to nitrogen supply. Theoretical and Experimental Plant Physiology, 2015, 27, 203-213.	2.4	23
119	The Proper Supply of S Increases Amino Acid Synthesis and Antioxidant Enzyme Activity in Tanzania Guinea Grass Used for Cd Phytoextraction. Water, Air, and Soil Pollution, 2017, 228, 1.	2.4	23
120	Development of a qPCR for Leifsonia xyli subsp. xyli and quantification of the effects of heat treatment of sugarcane cuttings on Lxx. Crop Protection, 2016, 80, 51-55.	2.1	22
121	Dry Priming of Maize Seeds Reduces Aluminum Stress. PLoS ONE, 2015, 10, e0145742.	2.5	22
122	Genetic divergence is not the same as phenotypic divergence. Molecular Breeding, 2011, 28, 277-280.	2.1	21
123	Leaf senescence in tomato mutants as affected by irradiance and phytohormones. Biologia Plantarum, 2013, 57, 749-757.	1.9	21
124	Hull-less Barley Varieties: Storage Proteins and Amino Acid Distribution in Relation to Nutritional Quality. Food Biotechnology, 2004, 18, 327-341.	1.5	19
125	Bacillus megaterium strains derived from water and soil exhibit differential responses to the herbicide mesotrione. PLoS ONE, 2018, 13, e0196166.	2.5	19
126	The Isolation of Antioxidant Enzymes from Mature Tomato (cv. Micro-Tom) Plants. Hortscience: A Publication of the American Society for Hortcultural Science, 2008, 43, 1608-1610.	1.0	19

#	Article	IF	Citations
127	Isolation, partial purification and characterization of isoenzymes of aspartate kinase from rice seeds. Journal of Plant Physiology, 1998, 153, 281-289.	3.5	18
128	Lysine and threonine biosynthesis in sorghum seeds: characterisation of aspartate kinase and homoserine dehydrogenase isoenzymes. Annals of Applied Biology, 2006, 149, 77-86.	2.5	18
129	Antioxidant enzyme activity and hydrogen peroxide content during the drying of Arabica coffee beans. European Food Research and Technology, 2013, 236, 753-758.	3.3	18
130	Assessment of the ozone tolerance of two soybean cultivars (Glycine max cv. Samba $\tilde{A}$ ba and Tracaj $\tilde{A}$ i) cultivated in Amazonian areas. Environmental Science and Pollution Research, 2014, 21, 10514-10524.	5.3	18
131	GST activity and membrane lipid saturation prevents mesotrione-induced cellular damage in Pantoea ananatis. AMB Express, 2016, 6, 70.	3.0	18
132	Unravelling homeostasis effects of phosphorus and zinc nutrition by leaf photochemistry and metabolic adjustment in cotton plants. Scientific Reports, 2021, 11, 13746.	3.3	18
133	Lysine catabolism: flow, metabolic role and regulation. Brazilian Journal of Plant Physiology, 2003, 15, 9-18.	0.5	18
134	Glutamine Synthetase Activity, Relative Water Content and Water Potential in Maize Submitted to Drought. Biologia Plantarum, 2003, 46, 301-304.	1.9	17
135	Enhanced transpiration rate in the <i>high pigment <math>1</math></i> significance. Plant Biology, 2011, 13, 546-550.	3.8	17
136	Oxidative processes during 'Golden' papaya fruit ripening. Brazilian Journal of Plant Physiology, 2012, 24, 85-94.	0.5	17
137	The Ig V H complementarity-determining region 3-containing Rb9 peptide, inhibits melanoma cells migration and invasion by interactions with Hsp90 and an adhesion G-protein coupled receptor. Peptides, 2016, 85, 1-15.	2.4	17
138	Aluminum-induced stress differently modifies Urochloa genotypes responses on growth and regrowth: root-to-shoot Al-translocation and oxidative stress. Theoretical and Experimental Plant Physiology, 2018, 30, 141-152.	2.4	17
139	Enzymatic antioxidantsâ€"Relevant or not to protect the photosynthetic system against cadmium-induced stress in Massai grass supplied with sulfur?. Environmental and Experimental Botany, 2018, 155, 702-717.	4.2	17
140	Quantitative proteomic analysis of tomato genotypes with differential cadmium tolerance. Environmental Science and Pollution Research, 2019, 26, 26039-26051.	5.3	17
141	Aluminum-induced toxicity in Urochloa brizantha genotypes: A first glance into root Al-apoplastic and -symplastic compartmentation, Al-translocation and antioxidant performance. Chemosphere, 2020, 243, 125362.	8.2	17
142	Identification of Maize Lines with Contrasting Responses to Applied Nitrogen. Journal of Plant Nutrition, 2005, 28, 903-915.	1.9	16
143	The antioxidant response of the liver of male Swiss mice raised on a AIN 93 or commercial diet. BMC Physiology, 2013, 13, 3.	3.6	16
144	Rapid screening for selection of heavy metal-tolerant plants. Crop Breeding and Applied Biotechnology, 2014, 14, 1-7.	0.4	16

#	Article	lF	Citations
145	Lysine metabolism in antisense C-hordein barley grains. Plant Physiology and Biochemistry, 2015, 87, 73-83.	5.8	16
146	Cadmium effects on plant reproductive organs: Physiological, productive, evolutionary and ecological aspects. Annals of Applied Biology, 2021, 178, 227-243.	2.5	16
147	Enzymes of lysine metabolism from Coix lacryma-jobi seeds. Plant Physiology and Biochemistry, 2002, 40, 25-32.	<b>5.</b> 8	15
148	Evaluation of biochemical and serological methods to identify and clustering yeast cells of oral Candida species by CHROMagar test, SDS-PAGE and ELISA. Brazilian Journal of Biology, 2004, 64, 317-326.	0.9	15
149	Lysine biosynthesis and nitrogen metabolism in quinoa (Chenopodium quinoa): Study of enzymes and nitrogen-containing compounds. Plant Physiology and Biochemistry, 2008, 46, 11-18.	5.8	15
150	Physiological effects of glyphosate over amino acid profile in conventional and transgenic soybean (Glycine max). Pesticide Biochemistry and Physiology, 2012, 102, 134-141.	3.6	15
151	Lysine metabolism and amino acid profile in maize grains from plants subjected to cadmium exposure. Scientia Agricola, 2020, 77, .	1.2	15
152	Effects of calcium, S-adenosylmethionine, S-(2-aminoethyl)-l-cysteine, methionine, valine and salt concentration on rice aspartate kinase isoenzymes. Plant Science, 2000, 150, 51-58.	3.6	14
153	RESPONSE OF RICE INBRED LINES TO CADMIUM EXPOSURE. Journal of Plant Nutrition, 2002, 25, 927-944.	1.9	14
154	Isolation of the bifunctional enzyme lysine 2-oxoglutarate reductase-saccharopine dehydrogenase from Phaseolus vulgaris. Amino Acids, 2003, 24, 179-186.	2.7	14
155	Isolation and Characterization of Enzymes Involved in Lysine Catabolism from Sorghum Seeds. Journal of Agricultural and Food Chemistry, 2005, 53, 1791-1798.	<b>5.</b> 2	13
156	Effect of the opaque and floury mutations on the accumulation of dry matter and protein fractions in maize endosperm. Plant Physiology and Biochemistry, 2005, 43, 549-556.	5.8	13
157	Nutritional Quality of Sorghum Seeds: Storage Proteins and Amino Acids. Food Biotechnology, 2008, 22, 377-397.	1.5	13
158	Evaluation of protein extraction methods for enhanced proteomic analysis of tomato leaves and roots. Anais Da Academia Brasileira De Ciencias, 2015, 87, 1853-1863.	0.8	13
159	Metabolic Interference of sod gene mutations on catalase activity in Escherichia coli exposed to Gramoxone® (paraquat) herbicide. Ecotoxicology and Environmental Safety, 2017, 139, 89-96.	6.0	13
160	Protein, Phytate and Minerals in Grains of Commercial Cowpea Genotypes. Anais Da Academia Brasileira De Ciencias, 2020, 92, e20180484.	0.8	13
161	Tolerância diferencial de variedades de cana-de-açúcar a estresse por herbicidas. Bragantia, 2010, 69, 395-404.	1.3	13
162	Aspartate kinase regulation in maize: Regulation by calcium and calmodulin. Phytochemistry, 1992, 31, 3735-3737.	2.9	12

#	Article	IF	CITATIONS
163	Dominant and Recessive Mutations Conferring Resistance to S-2-aminoethyl-L-cysteine in Maize. Journal of Plant Physiology, 1995, 145, 321-326.	3.5	12
164	Variation in the Amino Acid Concentration During Development of Canavalia ensiformes. Biologia Plantarum, 2004, 48, 309-312.	1.9	12
165	Proteomic analysis of mature barley grains from C-hordein antisense lines. Phytochemistry, 2016, 125, 14-26.	2.9	12
166	Physiological and biochemical responses of Dolichos lablab L. to cadmium support its potential as a cadmium phytoremediator. Journal of Soils and Sediments, 2017, 17, 1413-1426.	3.0	12
167	Luxurious Nitrogen Fertilization of Two Sugar Cane Genotypes Contrasting for Lignin Composition Causes Changes in the Stem Proteome Related to Carbon, Nitrogen, and Oxidant Metabolism but Does Not Alter Lignin Content. Journal of Proteome Research, 2017, 16, 3688-3703.	3.7	12
168	NO3â^'/NH4+ proportions affect cadmium bioaccumulation and tolerance of tomato. Environmental Science and Pollution Research, 2018, 25, 13916-13928.	5.3	12
169	Allantoin has a limited role as nitrogen source in cultured coffee cells. Journal of Plant Physiology, 2007, 164, 544-552.	3.5	11
170	Antioxidant enzyme activity in Acidithiobacillus ferrooxidans LR maintained in contact with chalcopyrite. Process Biochemistry, 2010, 45, 914-918.	3.7	11
171	Tropical soils cultivated with tomato: fractionation and speciation of Al. Environmental Monitoring and Assessment, 2015, 187, 160.	2.7	11
172	Antioxidant Defense Response in Plants to Cadmium Stress. , 2019, , 423-461.		11
173	There is plenty of room at the plant science: A review of nanoparticles applied to plant cultures. Annals of Applied Biology, 2021, 178, 149-168.	2.5	11
174	Seed priming with seaweed extract mitigate heat stress in spinach: effect on germination, seedling growth and antioxidant capacity. Bragantia, 2020, 79, 502-511.	1.3	11
175	Growth and ion uptake in Annona muricata and A. squamosa subjected to salt stress. Biologia Plantarum, 2005, 49, 285-288.	1.9	10
176	Dihydrodipicolinate synthase in opaque and floury maize mutants. Plant Science, 2007, 173, 458-467.	3.6	10
177	Amino Acid Synthesis in Plastids. Advances in Photosynthesis and Respiration, 2007, , 355-385.	1.0	10
178	Does nitrogen uptake affect nitrogen uptake efficiency, or vice versa?. Acta Physiologiae Plantarum, 2008, 30, 419-420.	2.1	10
179	Foliar application of 24-epibrassinolide improves Solanum nigrum L. tolerance to high levels of Zn without affecting its remediation potential. Chemosphere, 2020, 244, 125579.	8.2	10
180	Transgenerational hormesis: What do parents sacrifice for their offspring?. Current Opinion in Environmental Science and Health, 2022, 29, 100380.	4.1	10

#	Article	IF	Citations
181	Manipulação de cereais para acúmulo de lisina em sementes. Scientia Agricola, 2001, 58, 205-211.	1.2	9
182	Efeitos de tratamentos térmicos aplicados sobre frutas cÃŧricas armazenadas sob refrigeração. Ciencia Rural, 2006, 36, 1388-1396.	0.5	9
183	Ecophysiological adaptation and metal accumulation in water hyacinth from two tropical rivers. Brazilian Journal of Plant Physiology, 2010, 22, 49-59.	0.5	9
184	Structural and ecophysiological alterations of the water hyacinth [Eichhornia crassipes (Mart.) Solms] due to anthropogenic stress in Brazilian rivers. Brazilian Archives of Biology and Technology, 2011, 54, 1059-1068.	0.5	9
185	Protective effect of Mn(III)–desferrioxamine B upon oxidative stress caused by ozone and acid rain in the Brazilian soybean cultivar Glycine max "Sambaiba― Environmental Science and Pollution Research, 2015, 22, 5315-5324.	5.3	9
186	Automatically controlled deficit irrigation of lettuce in "organic potponics― Scientia Agricola, 2018, 75, 52-59.	1.2	9
187	Maize plants have different strategies to protect their developing seeds against cadmium toxicity. Theoretical and Experimental Plant Physiology, 2020, 32, 203-211.	2.4	9
188	Sequential path analysis: what does "sequential" mean?. Scientia Agricola, 2014, 71, 525-527.	1.2	9
189	Distribution of soluble amino acids in maize endosperm mutants. Scientia Agricola, 2003, 60, 91-96.	1.2	8
190	Saccharopine Dehydrogenase Activity in the High-Lysine Opaque and Floury Maize Mutants. Food Biotechnology, 2006, 20, 55-64.	1.5	8
191	A role for ferritin in the antioxidant system in coffee cell cultures. BioMetals, 2011, 24, 225-237.	4.1	8
192	Storage elicits a fast antioxidant enzyme activity in Araucaria angustifolia embryos. Acta Physiologiae Plantarum, 2016, 38, 1.	2.1	8
193	Soluble amino acid profile, mineral nutrient and carbohydrate content of maize kernels harvested from plants submitted to ascorbic acid seed priming. Anais Da Academia Brasileira De Ciencias, 2017, 89, 695-704.	0.8	8
194	Unraveling the mechanisms controlling Cd accumulation and Cdâ€tolerance in ⟨scp⟩ ⟨i⟩Brachiaria decumbens⟨ i⟩ ⟨ scp⟩ and ⟨scp⟩ ⟨i⟩Panicum maximum⟨ i⟩ ⟨ scp⟩ under summer and winter weather conditions. Physiologia Plantarum, 2021, 173, 20-44.	5.2	8
195	Proline Exogenously Supplied or Endogenously Overproduced Induces Different Nutritional, Metabolic, and Antioxidative Responses in Transgenic Tobacco Exposed to Cadmium. Journal of Plant Growth Regulation, $0$ , $1$ .	5.1	8
196	Improved procedures for extraction of lysine 2â€oxoglutarate reductase/saccharopine dehydrogenase (LOR/SDH) enzyme from <i>Phaseolus vulgaris</i> cultivars. New Zealand Journal of Crop and Horticultural Science, 2003, 31, 261-268.	1.3	7
197	Site of nitrate reduction in Jack bean <i>(Canavalia ensiformis)</i> changes from leaf to root during development. New Zealand Journal of Crop and Horticultural Science, 2006, 34, 131-137.	1.3	7
198	Variation in the enzyme activity and gene expression of myo-inositol-3-phosphate synthase and phytate accumulation during seed development in common bean (Phaseolus vulgaris L.). Acta Physiologiae Plantarum, 2007, 29, 265-271.	2.1	7

#	Article	IF	CITATIONS
199	Temporal dynamics of the response to Al stress in Eucalyptus grandis × Eucalyptus camaldulensis. Anais Da Academia Brasileira De Ciencias, 2015, 87, 1063-1070.	0.8	7
200	Characterization of genes responsive to osmotic and oxidative stresses of the sugarcane bacterial pathogen Leifsonia xyli subsp. xyli. Brazilian Journal of Microbiology, 2020, 51, 77-86.	2.0	7
201	Professor Simon Leather, <scp>Editorâ€inâ€Chief</scp> , <scp><i>Annals of Applied Biology</i></scp> 2015–2020. Annals of Applied Biology, 2020, 177, 280-281.	2.5	7
202	Comparative phosphoproteomic analysis of tomato genotypes with contrasting cadmium tolerance. Plant Cell Reports, 2021, 40, 2001-2008.	5.6	7
203	Inibição da ação do etileno retarda o desenvolvimento de injúrias de frio em tangor 'Murcott'. Ciencia Rural, 2010, 40, 1530-1536.	0.5	6
204	Photosynthesis is differently regulated during and after copperâ€induced nutritional stress in citrus trees. Physiologia Plantarum, 2018, 163, 399-413.	5.2	6
205	24-Epibrassinolide Mechanisms Regulating Blossom-End Rot Development in Tomato Fruit. Journal of Plant Growth Regulation, 2019, 38, 812-823.	5.1	6
206	Exogenous arginine modulates leaf antioxidant enzymes and hydrogen peroxide content in tomato plants under transient heat stresses. Bragantia, 0, 80, .	1.3	6
207	Impact of the colonization of Leifsonia xyli subsp. xyli in a susceptible sugarcane genotype on water status and physiological traits. European Journal of Plant Pathology, 2021, 159, 839-849.	1.7	6
208	Publications in the field of Agrarian Sciences in the Anais da Academia Brasileira de Ciências: what next?. Anais Da Academia Brasileira De Ciencias, 2012, 84, 1-3.	0.8	6
209	Exogenous Application of L-Arginine Improves Protein Content and Increases Yield of Pereskia aculeata Mill. Grown in Soilless Media Container. Horticulturae, 2022, 8, 142.	2.8	6
210	Production of Monoclonal Antibodies for Detection of a Secreted Aspartyl Proteinase from Candidaspp. in Biologic Specimens. Hybridoma, 2007, 26, 201-210.	0.4	5
211	Diallelic analysis for lysine and oil contents in maize grains. Scientia Agricola, 2009, 66, 204-209.	1.2	5
212	Foliar application of manganese increases sugarcane resistance to orange rust. Plant Pathology, 2019, 68, 1296-1307.	2.4	5
213	Urea- Versus Ammonium Nitrate–Based Fertilizers for Green Sugarcane Cultivation. Journal of Soil Science and Plant Nutrition, 2021, 21, 1329-1338.	3.4	5
214	Ratoon Stunting Disease (Leifsonia xyli subsp. xyli) affects source-sink relationship in sugarcane by decreasing sugar partitioning to tillers. Physiological and Molecular Plant Pathology, 2021, 116, 101723.	2.5	5
215	A closer look at the Impact Factor (JCR 2012): problems, concerns and actions needed. Anais Da Academia Brasileira De Ciencias, 2013, 85, 859-862.	0.8	5
216	SDS-Page and numerical analysis of Candida albicans from human oral cavity and other anatomical sites. Brazilian Journal of Microbiology, 2004, 35, 40-47.	2.0	5

#	Article	IF	CITATIONS
217	Variation in phytate accumulation in common bean (Phaseolus vulgaris L.) fruit explants. Brazilian Archives of Biology and Technology, 2008, 51, 163-173.	0.5	4
218	Does using stepwise variable selection to build sequential path analysis models make sense?. Physiologia Plantarum, 2011, 141, 197-200.	5.2	4
219	The centenary of <i>Annals of Applied Biology </i> ii 2014. Annals of Applied Biology, 2014, 164, 1-7.	2.5	4
220	Changes in soluble amino acid composition during Canavalia ensiformis development: responses to nitrogen deficiency. Theoretical and Experimental Plant Physiology, 2015, 27, 109-117.	2.4	4
221	Automation of lettuce seedlings irrigation with sensors deployed in the substrate or at the atmosphere. Scientia Agricola, 2019, 76, 179-189.	1.2	4
222	Antioxidant performance and aluminum accumulation in two genotypes of Solanum lycopersicum in response to low pH and aluminum availability and under their combined stress. Scientia Horticulturae, 2020, 259, 108813.	3.6	4
223	Interview with Carol Millman, former Executive Officer, Association of Applied Biologists 1997–2021, and Editorial Officer, <i>Annals of Applied Biology</i> 1989–2021. Annals of Applied Biology, 2021, 179, 148-150.	2.5	4
224	Plants under attack: Surviving the stress. Annals of Applied Biology, 2021, 178, 132-134.	2.5	4
225	Dissecting the Opaque-2 regulatory network using transcriptome and proteome approaches along with enzyme activity measurements. Scientia Agricola, 2002, 59, 407-414.	1.2	4
226	Isolation of enzymes involved in threonine biosynthesis from sorghum seeds. Brazilian Journal of Plant Physiology, 2004, 16, 95-104.	0.5	3
227	Determination of aspartate kinase activity in maize tissues. Scientia Agricola, 2005, 62, 184-189.	1.2	3
228	Changes in Amino Acid Profile in Roots of Glyphosate Resistant and Susceptible Soybean ( <i>Glycine) Tj ETQq0 C</i>	0 0 rgBT /O 5.2	overlock 10 Tf 3
229	Phytochelatins and their relationship with modulation of cadmium tolerance in plants., 2021,, 91-113.		3
230	Variation in the ureide content of Jack Bean during the reproductive stages in response to nitrate. Brazilian Archives of Biology and Technology, 2009, 52, 581-585.	0.5	3
231	Methods of asepsis for in vitro establishment and germination of Eucalyptus grandis. Journal of Biotechnology and Biodiversity, 2011, 2, 7-13.	0.1	3
232	Antioxidative metabolism in sugarcane (Poaceae) varieties subjected to water and saline stress. Revista Brasileira De Engenharia Agricola E Ambiental, 2020, 24, 776-782.	1.1	3
233	Wood production and nutritional and antioxidant status of field-grown Eucalyptus under a differential supply of lime and copper plus zinc. Industrial Crops and Products, 2022, 175, 114192.	5.2	3
234	particulado aderido Ãs raÃzes de aguapé e no sedimento em dois rios do sudeste brasileiro. Biotemas, 2010, , 119-128.	0.1	2

#	Article	IF	Citations
235	Growth, Yield and Grain Nutritional Quality in Three Brazilian Pearl Millets (Pennisetum americanum) Tj $$ ETQq $1$ 1	0.784314	rgBT /Over
236	Leaf 13C and 15N composition shedding light on easing drought stress through partial K substitution by Na in eucalyptus species. Scientific Reports, 2021, 11, 20158.	3.3	2
237	Despite a stressful period with the pandemic, publication is going strong: News about <i>Annals of Applied Biology, 2022, 180, 4-6.</i>	2.5	2
238	Interview with Prof. Nigel G. Halford, Rothamsted Research, United Kingdom. Annals of Applied Biology, 2022, 181, 130-132.	2.5	2
239	Publishing new and valuable information on abiotic stress responses in plants. Annals of Applied Biology, 2013, 163, 319-322.	2.5	1
240	Brachiaria enrichment with selenium-coated urea. Ciencia Rural, 2018, 48, .	0.5	1
241	Publishing goes on despite the virus—What is new for 2021. Annals of Applied Biology, 2021, 178, 4-5.	2.5	1
242	Current Research on the Role of Plant Primary and Secondary Metabolites in Response to Cadmium Stress., 2021,, 125-153.		1
243	Tolerance of tomato to cadmium-induced stress: analyzing cultivars with different fruit colors. Environmental Science and Pollution Research, 2021, 28, 26172-26181.	<b>5.</b> 3	1
244	Potential of hydrogen (pH) differentially modulates cadmium stress response in abscisic acid-deficient sitiens tomato mutant. Bragantia, 2019, 78, 317-327.	1.3	1
245	Cloning and sequence analysis of tomato cpDNA fragments: towards developing homologous chloroplast transformation vectors. Brazilian Journal of Plant Physiology, 2005, 17, 239-246.	0.5	1
246	Antioxidative responses of cell suspension cultures of two Coffea arabica varieties to low aluminum levels at pH 5.8. Hoehnea (revista), 2012, 39, 01-10.	0.2	1
247	Seed photorespiration: a perspective review. Plant Growth Regulation, 0, , 1.	3.4	1
248	Six years old and growing strongly. Food and Energy Security, 2017, 6, e00124.	4.3	0
249	An overview of the Brazilian Journal of Plant Physiology: we need a push!. Brazilian Journal of Plant Physiology, 2012, 24, 233-235.	0.5	O
250	Characterization of the development of cowpea cultivars and of the quantity and quality of proteins in their grains. Pesquisa Agropecuaria Brasileira, 0, 55, .	0.9	0