Osvaldo Ferrarese-Filho

List of Publications by Year
in descending order

91 papers	3,083 citations	159585 30 h-index	175258 52 g-index
91 all docs	91 docs citations	91 times ranked	3748 citing authors

#	Article	IF	Citations
1	Ferulic acid: a key component in grass lignocellulose recalcitrance to hydrolysis. Plant Biotechnology Journal, 2015, 13, 1224-1232.	8.3	210
2	The Acetyl Bromide Method Is Faster, Simpler and Presents Best Recovery of Lignin in Different Herbaceous Tissues than Klason and Thioglycolic Acid Methods. PLoS ONE, 2014, 9, e110000.	2.5	205
3	Biosynthesis and metabolic actions of simple phenolic acids in plants. Phytochemistry Reviews, 2020, 19, 865-906.	6.5	182
4	The role of L-DOPA in plants. Plant Signaling and Behavior, 2014, 9, e28275.	2.4	115
5	Cadmium-induced lignification restricts soybean root growth. Ecotoxicology and Environmental Safety, 2010, 73, 1959-1964.	6.0	112
6	Soybean (Glycine max) Root Lignification Induced by Ferulic Acid. The Possible Mode of Action. Journal of Chemical Ecology, 2008, 34, 1230-1241.	1.8	102
7	Exogenous caffeic acid inhibits the growth and enhances the lignification of the roots of soybean (Glycine max). Journal of Plant Physiology, 2011, 168, 1627-1633.	3.5	98
8	Cinnamic Acid Increases Lignin Production and Inhibits Soybean Root Growth. PLoS ONE, 2013, 8, e69105.	2.5	98
9	Root Growth Inhibition and Lignification Induced by Salt Stress in Soybean. Journal of Agronomy and Crop Science, 2010, 196, 467-473.	3.5	97
10	Lignification and Related Enzymes in Glycine max Root Growth-Inhibition by Ferulic Acid. Journal of Chemical Ecology, 2004, 30, 1203-1212.	1.8	96
11	Suppression of a single <scp>BAHD</scp> gene in <i>Setaria viridis</i> causes large, stable decreases in cell wall feruloylation and increases biomass digestibility. New Phytologist, 2018, 218, 81-93.	7.3	91
12	Feruloyl esterases: Biocatalysts to overcome biomass recalcitrance and for the production of bioactive compounds. Bioresource Technology, 2019, 278, 408-423.	9.6	90
13	Soybean root growth inhibition and lignification induced by p-coumaric acid. Environmental and Experimental Botany, 2009, 66, 25-30.	4.2	83
14	Heat stress causes alterations in the cell-wall polymers and anatomy of coffee leaves (Coffea arabica) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	10.2	81
15	Cell wall remodeling under salt stress: Insights into changes in polysaccharides, feruloylation, lignification, and phenolic metabolism in maize. Plant, Cell and Environment, 2020, 43, 2172-2191.	5.7	79
16	Methylxanthines and phenolic compounds in mate (Ilex paraguariensis St. Hil.) progenies grown in Brazil. Journal of Food Composition and Analysis, 2007, 20, 553-558.	3.9	66
17	Lignification and related parameters in copper-exposed Matricaria chamomilla roots: Role of H2O2 and NO in this process. Plant Science, 2010, 179, 383-389.	3.6	59
18	Plant cell wall composition and enzymatic deconstruction. AIMS Bioengineering, 2018, 5, 63-77.	1.1	56

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19	Hydrogen peroxide-acetic acid pretreatment increases the saccharification and enzyme adsorption on lignocellulose. Industrial Crops and Products, 2019, 140, 111657.	5.2	47
20	Salt stress alters the cell wall polysaccharides and anatomy of coffee (Coffea arabica L.) leaf cells. Carbohydrate Polymers, 2014, 112, 686-694.	10.2	46
21	Proximate composition and fatty acid profile of Bombyx mori L. chrysalis toast. Journal of Food Composition and Analysis, 2003, 16, 451-457.	3.9	41
22	Enhanced Lignin Monomer Production Caused by Cinnamic Acid and Its Hydroxylated Derivatives Inhibits Soybean Root Growth. PLoS ONE, 2013, 8, e80542.	2.5	41
23	Peroxidase and lipid peroxidation of soybean roots in response to p-coumaric and p-hydroxybenzoic acids. Brazilian Archives of Biology and Technology, 2003, 46, 193-198.	0.5	38
24	Lignin plays a key role in determining biomass recalcitrance in forage grasses. Renewable Energy, 2020, 147, 2206-2217.	8.9	38
25	Glyphosate affects lignin content and amino acid production in glyphosate-resistant soybean. Acta Physiologiae Plantarum, 2010, 32, 831-837.	2.1	36
26	Peroxidase and phenylalanine ammonia-lyase activities, phenolic acid contents, and allelochemicals-inhibited root growth of soybean. Biological Research, 2002, 35, 59-66.	3.4	36
27	Phenylalanine Ammonia-Lyase Activity in Soybean Roots Extract Measured by Reverse-Phase High Performance Liquid Chromatography. Plant Biology, 2000, 2, 152-153.	3.8	35
28	Nitric oxide affecting root growth, lignification and related enzymes in soybean seedlings. Acta Physiologiae Plantarum, 2010, 32, 1039-1046.	2.1	33
29	The Allelochemical L-DOPA Increases Melanin Production and Reduces Reactive Oxygen Species in Soybean Roots. Journal of Chemical Ecology, 2011, 37, 891-898.	1.8	32
30	The effects of dopamine on root growth and enzyme activity in soybean seedlings. Plant Signaling and Behavior, 2013, 8, e25477.	2.4	32
31	The effects of dopamine on antioxidant enzymes activities and reactive oxygen species levels in soybean roots. Plant Signaling and Behavior, 2014, 9, e977704.	2.4	31
32	Lipid Accumulation during Canola Seed Germination in Response to Cinnamic Acid Derivatives. Biologia Plantarum, 2000, 43, 313-316.	1.9	30
33	Inhibition of Zea mays coniferyl aldehyde dehydrogenase by daidzin: A potential approach for the investigation of lignocellulose recalcitrance. Process Biochemistry, 2020, 90, 131-138.	3.7	30
34	Peroxidase activity and lignification in soybean root growth-inhibition by juglone. Biologia Plantarum, 2006, 50, 315-317.	1.9	28
35	A new procedure for quantification of lignin in soybean (Glycine max (L.) Merrill) seed coat and their relationship with the resistance to mechanical damage. Seed Science and Technology, 2005, 33, 511-515.	1.4	27
36	Naringenin inhibits the growth and stimulates the lignification of soybean root. Brazilian Archives of Biology and Technology, 2010, 53, 533-542.	0.5	27

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37	Suppression of a BAHD acyltransferase decreases <i>p</i>â€coumaroyl on arabinoxylan and improves biomass digestibility in the model grass <i>Setaria viridis</i>. Plant Journal, 2021, 105, 136-150.	5.7	27
38	High performance liquid chromatography method forÂtheÂdetermination ofÂcinnamyl alcohol dehydrogenase activity inÂsoybean roots. Plant Physiology and Biochemistry, 2006, 44, 511-515.	5.8	26
39	Glyphosate-induced metabolic changes in susceptible and glyphosate-resistant soybean (Glycine max L.) roots. Pesticide Biochemistry and Physiology, 2009, 93, 28-33.	3.6	26
40	The photodynamic and direct actions of methylene blue on mitochondrial energy metabolism: A balance of the useful and harmful effects of this photosensitizer. Free Radical Biology and Medicine, 2020, 153, 34-53.	2.9	25
41	The effects of l-DOPA on root growth, lignification and enzyme activity in soybean seedlings. Acta Physiologiae Plantarum, 2012, 34, 1811-1817.	2.1	23
42	Canola (Brassica napus L.) seed germination influenced by cinnamic and benzoic acids and derivatives: effects on peroxidase. Seed Science and Technology, 2003, 31, 39-46.	1.4	22
43	Selective Liquid CO₂ Extraction of Purine Alkaloids in Different <i>Ilex paraguariensis</i> Progenies Grown under Environmental Influences. Journal of Agricultural and Food Chemistry, 2007, 55, 6835-6841.	5.2	22
44	Lignin content and peroxidase activity in soybean seed coat susceptible and resistant to mechanical damage. Acta Physiologiae Plantarum, 2005, 27, 103-108.	2.1	21
45	Role of Calcium on Phenolic Compounds and Enzymes Related to Lignification in Soybean (Glycine max) Tj ETQq1 1 0.784314 rgBT /Ou	3.4	20
46	Ferulic acid uptake by soybean root in nutrient culture. Acta Physiologiae Plantarum, 2000, 22, 121-124.	2.1	18
47	Î±-Tocopherol levels in natural and artificial aging of soybean seeds. Acta Scientiarum - Agronomy, 2012, 34, .	0.6	18
48	l-DOPA Increases Lignification Associated with Glycine max Root Growth-Inhibition. Journal of Chemical Ecology, 2007, 33, 265-275.	1.8	17
49	Root Growth and Enzymes Related to the Lignification of Maize Seedlings Exposed to the Allelochemical L-DOPA. Scientific World Journal, The, 2013, 2013, 1-6.	2.1	17
50	Exogenous application of rosmarinic acid improves saccharification without affecting growth and lignification of maize. Plant Physiology and Biochemistry, 2019, 142, 275-282.	5.8	16
51	Quantitative genetic analysis of methylxanthines and phenolic compounds in mate progenies. Pesquisa Agropecuaria Brasileira, 2010, 45, 171-177.	0.9	15
52	Designing xylan for improved sustainable biofuel production. Plant Biotechnology Journal, 2019, 17, 2225-2227.	8.3	15
53	Titanium Dioxide Nanoparticles Induce Root Growth Inhibition in Soybean Due to Physical Damages. Water, Air, and Soil Pollution, 2021, 232, 1.	2.4	14
54	Aluminum oxide nanoparticles affect the cell wall structure and lignin composition slightly altering the soybean growth. Plant Physiology and Biochemistry, 2021, 159, 335-346.	5.8	14

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55	Photosynthetic response of soybean to L-DOPA and aqueous extracts of velvet bean. Plant Growth Regulation, 2016, 80, 171-182.	3.4	12
56	Carbohydrate and lipid status in soybean roots influenced by ferulic acid uptake. Acta Physiologiae Plantarum, 2001, 23, 421-427.	2.1	11
57	Trans-aconitic acid inhibits the growth and photosynthesis of Glycine max. Plant Physiology and Biochemistry, 2018, 132, 490-496.	5.8	11
58	Modulation of cellulase activity by lignin-related compounds. Bioresource Technology Reports, 2020, 10, 100390.	2.7	11
59	Transport and metabolism of palmitate in the rat liver. Net flux and unidirectional fluxes across the cell membrane. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1103, 239-249.	2.6	10
60	A simple chromatographic assay to discriminate between glyphosate-resistant and susceptible soybean (Glycine max) cultivars. European Journal of Agronomy, 2009, 31, 173-176.	4.1	10
61	Feruloyl esterase from Aspergillus clavatus improves xylan hydrolysis of sugarcane bagasse. AIMS Bioengineering, 2016, 4, 1-11.	1.1	9
62	Lignin-induced growth inhibition in soybean exposed to iron oxide nanoparticles. Chemosphere, 2018, 211, 226-234.	8.2	8
63	The known unknowns in lignin biosynthesis and its engineering to improve lignocellulosic saccharification efficiency. Biomass Conversion and Biorefinery, 2023, 13, 2497-2515.	4.6	8
64	Cadmium uncouples mitochondrial oxidative phosphorylation and induces oxidative cellular stress in soybean roots. Environmental Science and Pollution Research, 2021, 28, 67711-67723.	5.3	8
65	Effects of fatty acids on carbohydrates and lipids of canola seeds during germination. Brazilian Archives of Biology and Technology, 1998, 41, 315-319.	0.5	7
66	L-DOPA and Dopamine in Plant Metabolism. Signaling and Communication in Plants, 2020, , 141-167.	0.7	7
67	Transport, metabolism and distribution space of octanoate in the perfused rat liver. , 1997, 15, 69-80.		6
68	Feruloyl esterase activity and its role in regulating the feruloylation of maize cell walls. Plant Physiology and Biochemistry, 2020, 156, 49-54.	5.8	6
69	Benzoxazolin-2(3H)-one inhibits soybean growth and alters the monomeric composition of lignin. Plant Signaling and Behavior, 2015, 10, e989059.	2.4	5
70	Acyl-homoserine Lactone from <i>Saccharum Ã— officinarum</i> with Stereochemistry-Dependent Growth Regulatory Activity. Journal of Natural Products, 2016, 79, 1316-1321.	3.0	5
71	Comparative effects of L-DOPA and velvet bean seed extract on soybean lignification. Plant Signaling and Behavior, 2018, 13, e1451705.	2.4	5
72	Entacapone improves saccharification without affecting lignin and maize growth: An in silico, in vitro, and in vivo approach. Plant Physiology and Biochemistry, 2020, 151, 421-428.	5.8	5

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73	Inhibition of Maize Caffeate 3-O-Methyltransferase by Nitecapone as a Possible Approach to Reduce Lignocellulosic Biomass Recalcitrance. Plant Molecular Biology Reporter, 2021, 39, 179-191.	1.8	5
74	The photosensitiser azure A disrupts mitochondrial bioenergetics through intrinsic and photodynamic effects. Toxicology, 2021, 455, 152766.	4.2	5
75	Consumption of ferulic and p-hydroxybenzoic acids by soybean root tips. Brazilian Archives of Biology and Technology, 2000, 43, 281-284.	0.5	4
76	Benzoxazolin-2-(3H)-one reduces photosynthetic activity and chlorophyll fluorescence in soybean. Photosynthetica, 2017, 55, 386-390.	1.7	4
77	Naringin inhibits the Zea mays coniferyl aldehyde dehydrogenase: an in silico and in vitro approach. Journal of Plant Biochemistry and Biotechnology, 2020, 29, 484-493.	1.7	4
78	Growth and root lignification of susceptible and glyphosate-resistant soybean. Acta Scientiarum - Agronomy, 2011, 33, .	0.6	2
79	Phenolic Compounds in Plants: Implications for Bioenergy. , 2017, , 39-52.		2
80	Calophyllum brasiliense Cambess: An alternative and promising source of shikimic acid. Sustainable Chemistry and Pharmacy, 2019, 14, 100188.	3.3	2
81	Inhibiting tricin biosynthesis improves maize lignocellulose saccharification. Plant Physiology and Biochemistry, 2022, 178, 12-19.	5.8	2
82	<i>p</i>-Methoxycinnamic acid disturbs cellular respiration and increases the lignification of <i>Euphorbia heterophylla</i> roots. Plant Biosystems, 2023, 157, 12-23.	1.6	2
83	EFFECTS OF CALCIUM ON LIGNIFICATION RELATED PARAMETERS IN SODIUM CHLORIDE-STRESSED SOYBEAN ROOTS. Journal of Plant Nutrition, 2012, 35, 1657-1670.	1.9	1
84	The photodynamic and intrinsic effects of Azure B on mitochondrial bioenergetics and the consequences of its intrinsic effects on hepatic energy metabolism. Photodiagnosis and Photodynamic Therapy, 2021, 35, 102446.	2.6	1
85	Sustainable production of succinic acid and 3-hydroxypropionic acid from renewable feedstocks. , 2022, , 367-386.		1
86	Ferulic acid depletion by cultured soybean seedlings under action of glucose and methionine. Brazilian Archives of Biology and Technology, 2000, 43, 515-518.	0.5	0
87	Root growth and lignification of glyphosate susceptible and resistant soybean at low temperatures. Semina:Ciencias Agrarias, 2013, 34, 509-516.	0.3	0
88	Bromoacetic acid inhibits pyruvate orthophosphate dikinase and reduces photosynthetic activity in maize. Acta Physiologiae Plantarum, 2021, 43, 1.	2.1	0
89	Treating maize plants with benzohydrazide increases saccharification of lignocellulose: A non-transgenic approach to improve cellulosic ethanol production. Biomass Conversion and Biorefinery, 0, , 1.	4.6	0
90	Bioassays on Plants. , 2009, , 399-428.		0

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91	Chromatographic determination of shikimate for identification of conventional soybean and glyphosate resistant soybean. Bioscience Journal, 2020, 36, .	0.4	0