Concepcion Avila

List of Publications by Year
in descending order

89 papers	2,752 citations	147801 31 h-index	206112 48 g-index
94 all docs	94 docs citations	94 times ranked	2855 citing authors

#	Article	IF	Citations
1	Deregulation of phenylalanine biosynthesis evolved with the emergence of vascular plants. Plant Physiology, 2022, 188, 134-150.	4.8	9
2	Ammonium regulates the development of pine roots through hormonal crosstalk and differential expression of transcription factors in the apex. Plant, Cell and Environment, 2022, 45, 915-935.	5.7	11
3	Maritime Pine Genomics in Focus. Compendium of Plant Genomes, 2022, , 67-123.	0.5	4
4	Functional Genomics of Mediterranean Pines. Compendium of Plant Genomes, 2022, , 193-218.	0.5	3
5	A revised view on the evolution of glutamine synthetase isoenzymes in plants. Plant Journal, 2022, 110, 946-960.	5.7	10
6	Identification of Metabolic Pathways Differentially Regulated in Somatic and Zygotic Embryos of Maritime Pine. Frontiers in Plant Science, 2022, 13, .	3.6	8
7	Special Issue Editorial: Plant Nitrogen Assimilation and Metabolism. Plants, 2021, 10, 1278.	3.5	3
8	The amino acid permease PpAAP1 mediates arginine transport in maritime pine. Tree Physiology, 2021, , .	3.1	2
9	Getting more bark for your buck: nitrogen economy of deciduous forest trees. Journal of Experimental Botany, 2020, 71, 4369-4372.	4.8	2
10	Enzymes Involved in the Biosynthesis of Arginine from Ornithine in Maritime Pine (Pinus pinaster Ait.). Plants, 2020, 9, 1271.	3.5	12
11	Structural and Functional Characteristics of Two Molecular Variants of the Nitrogen Sensor PII in Maritime Pine. Frontiers in Plant Science, 2020, 11, 823.	3.6	4
12	Transcriptional analysis of arogenate dehydratase genes identifies a link between phenylalanine biosynthesis and lignin biosynthesis. Journal of Experimental Botany, 2020, 71, 3080-3093.	4.8	10
13	Inorganic Nitrogen Form Determines Nutrient Allocation and Metabolic Responses in Maritime Pine Seedlings. Plants, 2020, 9, 481.	3.5	10
14	Understanding plant nitrogen nutrition through a laboratory experiment. Biochemistry and Molecular Biology Education, 2019, 47, 450-458.	1.2	2
15	Resources for conifer functional genomics at the omics era. Advances in Botanical Research, 2019, 89, 39-76.	1.1	15
16	The role of arginine metabolic pathway during embryogenesis and germination in maritime pine (Pinus) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.1	31
17	Analysis of the WUSCHEL-RELATED HOMEOBOX gene family in Pinus pinaster : New insights into the gene family evolution. Plant Physiology and Biochemistry, 2018, 123, 304-318.	5.8	36
18	<i>Pp<scp>NAC</scp>1</i>, a main regulator of phenylalanine biosynthesis and utilization in maritime pine. Plant Biotechnology Journal, 2018, 16, 1094-1104.	8.3	29

#	Article	IF	Citations
19	Root growth of somatic plants of hybrid Pinus strobus (L.) and P. wallichiana (A. B. Jacks.) is affected by the nitrogen composition of the somatic embryo germination medium. Trees - Structure and Function, 2018, 32, 371-381.	1.9	19
20	The arogenate dehydratase ADT2 is essential for seed development in Arabidopsis. Plant and Cell Physiology, 2018, 59, 2409-2420.	3.1	10
21	Nitrogen Metabolism and Biomass Production in Forest Trees. Frontiers in Plant Science, 2018, 9, 1449.	3.6	40
22	Glutamate synthases from conifers: gene structure and phylogenetic studies. BMC Genomics, 2018, 19, 65.	2.8	11
23	NAC Transcription Factors in Woody Plants. Progress in Botany Fortschritte Der Botanik, 2018, , 195-222.	0.3	3
24	Single-Copy Genes as Molecular Markers for Phylogenomic Studies in Seed Plants. Genome Biology and Evolution, 2017, 9, 1130-1147.	2.5	75
25	The gene expression landscape of pine seedling tissues. Plant Journal, 2017, 91, 1064-1087.	5.7	41
26	Elevated CO2 improved the growth of a double nitrate reductase defective mutant of Arabidopsis thaliana: The importance of maintaining a high energy status. Environmental and Experimental Botany, 2017, 140, 110-119.	4.2	5
27	Molecular fundamentals of nitrogen uptake and transport in trees. Journal of Experimental Botany, 2017, 68, 2489-2500.	4.8	44
28	Characterization of Three L-Asparaginases from Maritime Pine (Pinus pinaster Ait.). Frontiers in Plant Science, 2017, 8, 1075.	3.6	2
29	Overexpression of a pine Dof transcription factor in hybrid poplars: A comparative study in trees growing under controlled and natural conditions. PLoS ONE, 2017, 12, e0174748.	2.5	21
30	Nitrogen Economy and Nitrogen Environmental Interactions in Conifers. Agronomy, 2016, 6, 26.	3.0	15
31	Biosynthesis and Metabolic Fate of Phenylalanine in Conifers. Frontiers in Plant Science, 2016, 7, 1030.	3.6	98
32	Identification of a small protein domain present in all plant lineages that confers high prephenate dehydratase activity. Plant Journal, 2016, 87, 215-229.	5.7	33
33	Rootâ€“shoot interactions explain the reduction of leaf mineral content in <i>Arabidopsis</i> plants grown under elevated [<scp>CO₂</scp>] conditions. Physiologia Plantarum, 2016, 158, 65-79.	5.2	42
34	Selection and testing of reference genes for accurate RT-qPCR in adult needles and seedlings of maritime pine. Tree Genetics and Genomes, 2016, 12, 1.	1.6	18
35	Poplar trees for phytoremediation of high levels of nitrate and applications in bioenergy. Plant Biotechnology Journal, 2016, 14, 299-312.	8.3	45
36	Differential expression of cell wall related genes in the seeds of soft- and hard-seeded pomegranate genotypes. Scientia Horticulturae, 2016, 205, 7-16.	3.6	31

#	Article	IF	Citations
37	Establishing gene models from the Pinus pinaster genome using gene capture and BAC sequencing. BMC Genomics, 2016, 17, 148.	2.8	10
38	Deciphering the molecular basis of ammonium uptake and transport in maritime pine. Plant, Cell and Environment, 2016, 39, 1669-1682.	5.7	23
39	Transcriptome-wide analysis supports environmental adaptations of two Pinus pinaster populations from contrasting habitats. BMC Genomics, 2015, 16, 909.	2.8	20
40	The NAC transcription factor family in maritime pine (Pinus Pinaster): molecular regulation of two genes involved in stress responses. BMC Plant Biology, 2015, 15, 254.	3.6	54
41	The overexpression of the pine transcription factor <scp>PpDof</scp>5 in <i>Arabidopsis</i> leads to increased lignin content and affects carbon and nitrogen metabolism. Physiologia Plantarum, 2015, 155, 369-383.	5.2	18
42	Understanding developmental and adaptive cues in pine through metabolite profiling and co-expression network analysis. Journal of Experimental Botany, 2015, 66, 3113-3127.	4.8	34
43	Redundancy and metabolic function of the glutamine synthetase gene family in poplar. BMC Plant Biology, 2015, 15, 20.	3.6	29
44	Root and shoot performance of Arabidopsis thaliana exposed to elevated CO2: A physiologic, metabolic and transcriptomic response. Journal of Plant Physiology, 2015, 189, 65-76.	3.5	37
45	Deciphering the Role of Aspartate and Prephenate Aminotransferase Activities in Plastid Nitrogen Metabolism. Plant Physiology, 2014, 164, 92-104.	4.8	60
46	Transcriptome analysis in maritime pine using laser capture microdissection and 454 pyrosequencing. Tree Physiology, 2014, 34, 1278-1288.	3.1	38
47	<i>De novo</i> assembly of maritime pine transcriptome: implications for forest breeding and biotechnology. Plant Biotechnology Journal, 2014, 12, 286-299.	8.3	115
48	Plastidic aspartate aminotransferases and the biosynthesis of essential amino acids in plants. Journal of Experimental Botany, 2014, 65, 5527-5534.	4.8	111
49	The family of Dof transcription factors in pine. Trees - Structure and Function, 2013, 27, 1547-1557.	1.9	11
50	Identification of genes differentially expressed in ectomycorrhizal roots during the Pinus pinasterâ€“Laccaria bicolor interaction. Planta, 2013, 237, 1637-1650.	3.2	18
51	A <scp>M</scp>yb transcription factor regulates genes of the phenylalanine pathway in maritime pine. Plant Journal, 2013, 74, 755-766.	5.7	64
52	Novel Insights into Regulation of Asparagine Synthetase in Conifers. Frontiers in Plant Science, 2012, 3, 100.	3.6	50
53	Gene expression profiling in the stem of young maritime pine trees: detection of ammonium stress-responsive genes in the apex. Trees - Structure and Function, 2012, 26, 609-619.	1.9	21
54	GENote v.Î²: A Web Tool Prototype for Annotation of Unfinished Sequences in Non-model Eukaryotes. Lecture Notes in Computer Science, 2012, , 66-71.	1.3	0

#	Article	IF	Citations
55	A maritime pine antimicrobial peptide involved in ammonium nutrition. Plant, Cell and Environment, 2011, 34, 1443-1453.	5.7	21
56	The glutamine synthetase gene family in Populus. BMC Plant Biology, 2011, 11, 119.	3.6	63
57	EuroPineDB: a high-coverage web database for maritime pine transcriptome. BMC Genomics, 2011, 12, 366.	2.8	59
58	Identification of genes regulated by ammonium availability in the roots of maritime pine trees. Amino Acids, 2010, 39, 991-1001.	2.7	30
59	Ammonium tolerance and the regulation of two cytosolic glutamine synthetases in the roots of sorghum. Functional Plant Biology, 2010, 37, 55.	2.1	42
60	Differential regulation of two glutamine synthetase genes by a single Dof transcription factor. Plant Journal, 2008, 56, 73-85.	5.7	59
61	Ammonium assimilation and amino acid metabolism in conifers. Journal of Experimental Botany, 2007, 58, 2307-2318.	4.8	153
62	Expression patterns of two glutamine synthetase genes in zygotic and somatic pine embryos support specific roles in nitrogen metabolism during embryogenesis. New Phytologist, 2006, 169, 35-44.	7.3	39
63	Molecular characterization of a receptor-like protein kinase gene from pine (Pinus sylvestris L.). Planta, 2006, 224, 12-19.	3.2	10
64	Does Intermittent Hypoxia Increase Erythropoiesis in Professional Cyclists During a 3-Week Race?. Applied Physiology, Nutrition, and Metabolism, 2005, 30, 61-73.	1.7	7
65	Up-Regulation and Localization of Asparagine Synthetase in Tomato Leaves Infected by the Bacterial Pathogen Pseudomonas syringae. Plant and Cell Physiology, 2004, 45, 770-780.	3.1	77
66	Increased sucrose level and altered nitrogen metabolism in Arabidopsis thaliana transgenic plants expressing antisense chloroplastic fructose-1,6-bisphosphatase. Journal of Experimental Botany, 2004, 55, 2495-2503.	4.8	52
67	Interaction of cis-acting elements in the expression of a gene encoding cytosolic glutamine synthetase in pine seedlings. Physiologia Plantarum, 2004, 121, 537-545.	5.2	5
68	Functional interactions between a glutamine synthetase promoter and MYB proteins. Plant Journal, 2004, 39, 513-526.	5.7	80
69	Molecular analysis of the 5'-upstream region of a gibberellin-inducible cytosolic glutamine synthetase gene (GS1b) expressed in pine vascular tissue. Planta, 2004, 218, 1036-1045.	3.2	32
70	Intensity of Exercise according to Topography in Professional Cyclists. Medicine and Science in Sports and Exercise, 2003, 35, 1209-1215.	0.4	20
71	Functional Expression of Two Pine Glutamine Synthetase Genes in Bacteria Reveals that they Encode Cytosolic Holoenzymes with Different Molecular and Catalytic Properties. Plant and Cell Physiology, 2002, 43, 802-809.	3.1	29
72	Epidemiological and immunological aspects of human visceral leishmaniasis on Margarita Island, Venezuela. Memorias Do Instituto Oswaldo Cruz, 2002, 97, 1079-1083.	1.6	13

#	Article	IF	Citations
73	Urinary Levels of 8-Hydroxydeoxyguanosine as a Marker of Oxidative Damage in Road Cycling. Free Radical Research, 2002, 36, 247-253.	3.3	42
74	Molecular and enzymatic analysis of ammonium assimilation in woody plants. Journal of Experimental Botany, 2002, 53, 891-904.	4.8	105
75	Efficient preparation of maritime pine (Pinus pinaster) protoplasts suitable for transgene expression analysis. Plant Molecular Biology Reporter, 2001, 19, 361-366.	1.8	17
76	The promoter of a cytosolic glutamine synthetase gene from the conifer Pinus sylvestris is active in cotyledons of germinating seeds and light-regulated in transgenic Arabidopsis thaliana. Physiologia Plantarum, 2001, 112, 388-396.	5.2	9
77	Spatial and temporal expression of two cytosolic glutamine synthetase genes in Scots pine: functional implications on nitrogen metabolism during early stages of conifer development. Plant Journal, 2001, 25, 93-102.	5.7	7
78	Spatial and temporal expression of two cytosolic glutamine synthetase genes in Scots pine: functional implications on nitrogen metabolism during early stages of conifer development. Plant Journal, 2001, 25, 93-102.	5.7	57
79	Evaluation of the applicability of two different immunoassays for the detection of wheat gluten in baby foods. Biochemistry and Molecular Biology Education, 2000, 28, 261-264.	1.2	3
80	Evaluation of the applicability of two different immunoassays for the detection of wheat gluten in baby foods. Biochemistry and Molecular Biology Education, 2000, 28, 261-264.	1.2	2
81	An improved and rapid protocol for the isolation of poly(A)+-RNA from small samples of scots pine seedlings. Plant Molecular Biology Reporter, 2000, 18, 117-122.	1.8	2
82	Two genes encoding distinct cytosolic glutamine synthetases are closely linked in the pine genome. FEBS Letters, 2000, 477, 237-243.	2.8	32
83	Developing SSCP markers in two Pinus species. Molecular Breeding, 1999, 5, 21-31.	2.1	49
84	Effects of phosphinotricin treatment on glutamine synthetase isoforms in Scots pine seedlings. Plant Physiology and Biochemistry, 1998, 36, 857-863.	5.8	31
85	Cloning and sequence analysis of a cDNA for barley ferredoxin-dependent glutamate synthase and molecular analysis of photorespiratory mutants deficient in the enzyme. Planta, 1993, 189, 475-83.	3.2	42
86	Different Characteristics of the Two Glutamate Synthases in the Green Leaves of Lycopersicon esculentum. Plant Physiology, 1987, 85, 1036-1039.	4.8	46
87	Effect of light-dark transition on glutamine synthetase activity in tomato leaves. Physiologia Plantarum, 1986, 66, 648-652.	5.2	18
88	Immunochemical Comparison of Glutamine Synthetases from Some Solanaceae Plants. Plant Physiology, 1986, 82, 585-587.	4.8	6
89	Separation of two forms of glutamate synthase in leaves of tomato (Lycopersicon esculentum). Biochemical and Biophysical Research Communications, 1984, 122, 1125-1130.	2.1	20