LÃ¡szlÃ³ Szabados

List of Publications by Year
in descending order

70 papers	9,156 citations	87888 38 h-index	95266 68 g-index
71 all docs	71 docs citations	71 times ranked	10002 citing authors

#	Article	IF	Citations
1	Proline: a multifunctional amino acid. Trends in Plant Science, 2010, 15, 89-97.	8.8	3,090
2	Duplicated <i>P5CS</i> genes of Arabidopsis play distinct roles in stress regulation and developmental control of proline biosynthesis. Plant Journal, 2008, 53, 11-28.	5.7	642
3	Differential expression of two P5CS genes controlling proline accumulation during saltâ€stress requires ABA and is regulated by ABA1 , ABI1 and AXR2 in Arabidopsis. Plant Journal, 1997, 12, 557-569.	5.7	364
4	Proline metabolism and transport in plant development. Amino Acids, 2010, 39, 949-962.	2.7	290
5	Plant glutathione peroxidases: Emerging role of the antioxidant enzymes in plant development and stress responses. Journal of Plant Physiology, 2015, 176, 192-201.	3.5	284
6	Light-dependent induction of proline biosynthesis by abscisic acid and salt stress is inhibited by brassinosteroid in Arabidopsis. Plant Molecular Biology, 2003, 51, 363-372.	3.9	251
7	Proline Accumulation and AtP5CS2 Gene Activation Are Induced by Plant-Pathogen Incompatible Interactions in Arabidopsis. Molecular Plant-Microbe Interactions, 2004, 17, 343-350.	2.6	250
8	Methods for Determination of Proline in Plants. Methods in Molecular Biology, 2010, 639, 317-331.	0.9	232
9	The Impact of the Absence of Aliphatic Glucosinolates on Insect Herbivory in Arabidopsis. PLoS ONE, 2008, 3, e2068.	2.5	223
10	Arabidopsis PPP family of serine/threonine phosphatases. Trends in Plant Science, 2007, 12, 169-176.	8.8	201
11	The Heat Shock Factor A4A Confers Salt Tolerance and Is Regulated by Oxidative Stress and the Mitogen-Activated Protein Kinases MPK3 and MPK6 Â Â Â. Plant Physiology, 2014, 165, 319-334.	4.8	186
12	Regulatory interaction of PRL1 WD protein with Arabidopsis SNF1-like protein kinases. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 5322-5327.	7.1	178
13	The low oxygen, oxidative and osmotic stress responses synergistically act through the ethylene response factor <scp>VII</scp> genes <i><scp>RAP</scp>2.12</i>,<i><scp>RAP</scp>2.2</i> and <i><scp>RAP</scp>2.3</i>. Plant Journal, 2015, 82, 772-784.	5.7	170
14	Evolution of proline biosynthesis: enzymology, bioinformatics, genetics, and transcriptional regulation. Biological Reviews, 2015, 90, 1065-1099.	10.4	151
15	Distribution of 1000 sequenced T-DNA tags in theArabidopsisgenome. Plant Journal, 2002, 32, 233-242.	5.7	143
16	Arabidopsis PPR40 Connects Abiotic Stress Responses to Mitochondrial Electron Transport Â Â. Plant Physiology, 2008, 146, 1721-1737.	4.8	137
17	Differential expression of two <i>P5CS</i> genes controlling proline accumulation during saltâ€stress requires ABA and is regulated by <i>ABA1, ABI1</i> and <i>AXR2</i> in <i>Arabidopsis</i>. Plant Journal, 1997, 12, 557-569.	5.7	134
18	Gene identification with sequenced Tâ€DNA tags generated by transformation ofArabidopsiscell suspension. Plant Journal, 1998, 13, 707-716.	5.7	122

#	Article	IF	Citations
19	Functional Identification of Arabidopsis Stress Regulatory Genes Using the Controlled cDNA Overexpression System Â Â. Plant Physiology, 2008, 147, 528-542.	4.8	117
20	Proline metabolism as regulatory hub. Trends in Plant Science, 2022, 27, 39-55.	8.8	109
21	Arabidopsis S6 kinase mutants display chromosome instability and altered RBR1â€“E2F pathway activity. EMBO Journal, 2010, 29, 2979-2993.	7.8	98
22	The Arabidopsis ZINC FINGER PROTEIN3 Interferes with Abscisic Acid and Light Signaling in Seed Germination and Plant Development Â Â Â. Plant Physiology, 2014, 165, 1203-1220.	4.8	89
23	Diversity of plant heat shock factors: regulation, interactions, and functions. Journal of Experimental Botany, 2021, 72, 1558-1575.	4.8	88
24	Inactivation of Plasma Membraneâ€“Localized CDPK-RELATED KINASE5 Decelerates PIN2 Exocytosis and Root Gravitropic Response in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 1592-1608.	6.6	87
25	Uptake of isolated plant chromosomes by plant protoplasts. Planta, 1981, 151, 141-145.	3.2	83
26	Proline Accumulation Is Regulated by Transcription Factors Associated with Phosphate Starvation. Plant Physiology, 2017, 175, 555-567.	4.8	73
27	Differential contribution of individual dehydrin genes from Physcomitrella patens to salt and osmotic stress tolerance. Plant Science, 2012, 190, 89-102.	3.6	72
28	In vitro somatic embryogenesis and plant regeneration of cassava. Plant Cell Reports, 1987, 6, 248-251.	5.6	70
29	Elevation of free proline and proline-rich protein levels by simultaneous manipulations of proline biosynthesis and degradation in plants. Plant Science, 2011, 181, 140-150.	3.6	67
30	Isolation and characterization of two different cDNAs of delta1-pyrroline-5-carboxylate synthase in alfalfa, transcriptionally induced upon salt stress. Plant Molecular Biology, 1998, 38, 755-764.	3.9	65
31	Overexpression of the mitochondrial PPR40 gene improves salt tolerance in Arabidopsis. Plant Science, 2012, 182, 87-93.	3.6	63
32	The mitogen-activated protein kinase 4-phosphorylated heat shock factor A4A regulates responses to combined salt and heat stresses. Journal of Experimental Botany, 2019, 70, 4903-4918.	4.8	63
33	New plant promoter and enhancer testing vectors. Molecular Breeding, 1995, 1, 419-423.	2.1	60
34	Gene Trapping with Firefly Luciferase in Arabidopsis. Tagging of Stress-Responsive Genes. Plant Physiology, 2004, 134, 18-27.	4.8	57
35	Specialized vectors for gene tagging and expression studies. , 1994, , 53-74.		52
36	Plants in Extreme Environments. Advances in Botanical Research, 2011, 57, 105-150.	1.1	48

#	Article	IF	Citations
37	Recovery from heat, salt and osmotic stress in Physcomitrella patens requires a functional small heat shock protein PpHsp16.4. BMC Plant Biology, 2013, 13, 174.	3.6	48
38	Exogenous salicylic acid-triggered changes in the glutathione transferases and peroxidases are key factors in the successful salt stress acclimation of Arabidopsis thaliana. Functional Plant Biology, 2015, 42, 1129.	2.1	48
39	Exogenously applied salicylic acid maintains redox homeostasis in salt-stressed Arabidopsis gr1 mutants expressing cytosolic roGFP1. Plant Growth Regulation, 2018, 86, 181-194.	3.4	40
40	Fusion between interphase and mitotic plant protoplasts. Experimental Cell Research, 1980, 127, 442-446.	2.6	36
41	Regulation of plant genes specifically induced in nitrogen-fixing nodules: role of cis-acting elements and trans-acting factors in leghemoglobin gene expression. Plant Molecular Biology, 1989, 13, 319-325.	3.9	36
42	Functional Analysis of the Sesbania rostrata Leghemoglobin glb3 Gene 5'-Upstream Region in Transgenic Lotus corniculatus and Nicotiana tabacum Plants. Plant Cell, 1990, 2, 973.	6.6	36
43	Physiological and molecular responses to heavy metal stresses suggest different detoxification mechanism of Populus deltoides and P. x canadensis. Journal of Plant Physiology, 2016, 201, 62-70.	3.5	35
44	A simple method for isolation, liquid culture, transformation and regeneration of Arabidopsis thaliana protoplasts. Plant Cell Reports, 1995, 14, 221-6.	5.6	33
45	PlantSize Offers an Affordable, Non-destructive Method to Measure Plant Size and Color in Vitro. Frontiers in Plant Science, 2018, 9, 219.	3.6	33
46	Comprehensive analysis of antioxidant mechanisms in Arabidopsis glutathione peroxidase-like mutants under salt- and osmotic stress reveals organ-specific significance of the AtGPXLâ€™s activities. Environmental and Experimental Botany, 2018, 150, 127-140.	4.2	30
47	The AtCRK5 Protein Kinase Is Required to Maintain the ROS NO Balance Affecting the PIN2-Mediated Root Gravitropic Response in Arabidopsis. International Journal of Molecular Sciences, 2021, 22, 5979.	4.1	30
48	Enhanced activity of galactono-1,4-lactone dehydrogenase and ascorbateâ€"glutathione cycle in mitochondria from complex III deficient Arabidopsis. Plant Physiology and Biochemistry, 2011, 49, 809-815.	5.8	29
49	Light Control of Salt-Induced Proline Accumulation Is Mediated by ELONGATED HYPOCOTYL 5 in Arabidopsis. Frontiers in Plant Science, 2019, 10, 1584.	3.6	28
50	Functional Analysis of the Arabidopsis thaliana CDPK-Related Kinase Family: AtCRK1 Regulates Responses to Continuous Light. International Journal of Molecular Sciences, 2018, 19, 1282.	4.1	27
51	Chimeric genes and transgenic plants are used to study the regulation of genes involved in symbiotic plant-microbe interactions (nodulin genes). Genesis, 1990, 11, 182-196.	2.1	25
52	Gene mining in halophytes: functional identification of stress tolerance genes in <i>Lepidium crassifolium</i>. Plant, Cell and Environment, 2016, 39, 2074-2084.	5.7	25
53	Callus formation from protoplasts of a sugarbeet cell suspension culture. Plant Cell Reports, 1985, 4, 195-198.	5.6	24
54	CRK5 Protein Kinase Contributes to the Progression of Embryogenesis of Arabidopsis thaliana. International Journal of Molecular Sciences, 2019, 20, 6120.	4.1	24

#	Article	IF	Citations
55	The role of Arabidopsis glutathione transferase F9 gene under oxidative stress in seedlings. Acta Biologica Hungarica, 2015, 66, 406-418.	0.7	21
56	T-DNA trapping of a cryptic promoter identifies an ortholog of highly conserved SNZ growth arrest response genes in Arabidopsis. Plant Science, 1998, 138, 217-228.	3.6	20
57	AtCRK5 Protein Kinase Exhibits a Regulatory Role in Hypocotyl Hook Development during Skotomorphogenesis. International Journal of Molecular Sciences, 2019, 20, 3432.	4.1	20
58	Genetic Screens to Identify Plant Stress Genes. Methods in Molecular Biology, 2010, 639, 121-139.	0.9	16
59	SELENOPROTEIN O is a chloroplast protein involved in ROS scavenging and its absence increases dehydration tolerance in Arabidopsis thaliana. Plant Science, 2018, 270, 278-291.	3.6	15
60	Overexpression of the Arabidopsis glutathione peroxidase-like 5 gene (AtGPXL5) resulted in altered plant development and redox status. Environmental and Experimental Botany, 2019, 167, 103849.	4.2	15
61	Regeneration of isolated mesophyll and cell suspension protoplasts to plants in Stylosanthes guianensis. A tropical forage legume. Plant Cell Reports, 1986, 5, 174-177.	5.6	12
62	Genetic technologies for the identification of plant genes controlling environmental stress responses. Functional Plant Biology, 2009, 36, 696.	2.1	11
63	Microcystin-LR, a cyanobacterial toxin affects root development by changing levels of PIN proteins and auxin response in Arabidopsis roots. Chemosphere, 2021, 276, 130183.	8.2	6
64	Transformation Using Controlled cDNA Overexpression System. Methods in Molecular Biology, 2012, 913, 277-290.	0.9	5
65	Small paraquat resistance proteins modulate paraquat and ABA responses and confer drought tolerance to overexpressing Arabidopsis plants. Plant, Cell and Environment, 2022, 45, 1985-2003.	5.7	5
66	Striving Towards Abiotic Stresses: Role of the Plant CDPK Superfamily Members. , 2019, , 99-105.		4
67	Crosstalk between the Arabidopsis Glutathione Peroxidase-Like 5 Isoenzyme (AtGPXL5) and Ethylene. International Journal of Molecular Sciences, 2022, 23, 5749.	4.1	4
68	Biochemical and Gene Expression Analyses in Different Poplar Clones: The Selection Tools for Afforestation of Halomorphic Environments. Forests, 2021, 12, 636.	2.1	3
69	Characterization of abiotic stress-responsive RD29B and RD17 genes in different poplar clones. Topola, 2020, , 13-20.	0.4	2
70	Screening Stress Tolerance Traits in Arabidopsis Cell Cultures. Methods in Molecular Biology, 2016, 1398, 235-246.	0.9	0