

# Metabolic Engineering of Osmoprotectant Accumulation

Metabolic Engineering

4, 49-56

DOI: [10.1006/mben.2001.0208](https://doi.org/10.1006/mben.2001.0208)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Engineering salt tolerance in plants. <i>Current Opinion in Biotechnology</i> , 2002, 13, 146-150.	3.3	361
2	Enhanced formation of flowers in salt-stressed <i>Arabidopsis</i> after genetic engineering of the synthesis of glycine betaine. <i>Plant Journal</i> , 2003, 36, 165-176.	2.8	116
3	Engineering Salt Tolerance in Plants. <i>Biotechnology and Genetic Engineering Reviews</i> , 2003, 20, 261-276.	2.4	23
4	Osmosensor ProP of <i>Escherichia coli</i> Responds to the Concentration, Chemistry, and Molecular Size of Osmolytes in the Proteoliposome Lumen. <i>Biochemistry</i> , 2003, 42, 410-420.	1.2	86
5	Creation of a Fully Functional Cysteine-Less Variant of Osmosensor and Proton-Osmoprotectant Symporter ProP from <i>Escherichia coli</i> and Its Application to Assess the Transporter's Membrane Orientation. <i>Biochemistry</i> , 2003, 42, 11815-11823.	1.2	41
6	Building stress tolerance through over-producing trehalose in transgenic plants. <i>Trends in Plant Science</i> , 2003, 8, 355-357.	4.3	117
7	$\beta$ -Alanine N-Methyltransferase of <i>Limonium latifolium</i> . cDNA Cloning and Functional Expression of a Novel N-Methyltransferase Implicated in the Synthesis of the Osmoprotectant $\beta$ -Alanine Betaine. <i>Plant Physiology</i> , 2003, 132, 1642-1651.	2.3	35
9	Evidence from Engineering that Decarboxylation of Free Serine is the Major Source of Ethanolamine Moieties in Plants. <i>Plant and Cell Physiology</i> , 2003, 44, 1185-1191.	1.5	51
10	Isolation and Functional Characterization of N-Methyltransferases That Catalyze Betaine Synthesis from Glycine in a Halotolerant Photosynthetic Organism <i>Aphanothece halophytica</i> . <i>Journal of Biological Chemistry</i> , 2003, 278, 4932-4942.	1.6	109
11	The effects of salt stress on growth, nitrate reduction and proline and glycine betaine accumulation in <i>Prosopis alba</i> . <i>Brazilian Journal of Plant Physiology</i> , 2004, 16, 39-46.	0.5	142
12	Characterization and Metabolic Function of a Peroxisomal Sarcosine and Pipecolate Oxidase from <i>Arabidopsis</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 16947-16953.	1.6	69
13	Engineering of enhanced glycine betaine synthesis improves drought tolerance in maize. <i>Plant Biotechnology Journal</i> , 2004, 2, 477-486.	4.1	301
14	Metabolite profiling as an aid to metabolic engineering in plants. <i>Current Opinion in Plant Biology</i> , 2004, 7, 196-201.	3.5	175
15	Differential antioxidative responses to water stress among five mulberry ( <i>Morus alba</i> L.) cultivars. <i>Environmental and Experimental Botany</i> , 2004, 52, 33-42.	2.0	154
16	Recent Advances in Genetics of Salt Tolerance in Tomato. <i>Plant Cell, Tissue and Organ Culture</i> , 2004, 76, 101-119.	1.2	233
17	When Defense Pathways Collide. The Response of <i>Arabidopsis</i> to a Combination of Drought and Heat Stress. <i>Plant Physiology</i> , 2004, 134, 1683-1696.	2.3	1,438
18	Mechanisms underlying plant resilience to water deficits: prospects for water-saving agriculture. <i>Journal of Experimental Botany</i> , 2004, 55, 2365-2384.	2.4	1,019
19	Stress-induced expression in wheat of the <i>Arabidopsis thaliana</i> DREB1A gene delays water stress symptoms under greenhouse conditions. <i>Genome</i> , 2004, 47, 493-500.	0.9	369

#	ARTICLE	IF	CITATIONS
20	Environmental VOCsâ€“formation and degradation of dimethyl sulfide, methanethiol and related materials. <i>Chemosphere</i> , 2004, 55, 291-317.	4.2	230
21	Expression of plant inositol transporters in yeast. <i>Plant Science</i> , 2004, 166, 245-252.	1.7	8
22	Drought-induced responses of photosynthesis and antioxidant metabolism in higher plants. <i>Journal of Plant Physiology</i> , 2004, 161, 1189-1202.	1.6	1,699
23	Osmo-Regulation of Bacterial Transcription via Poised RNA Polymerase. <i>Molecular Cell</i> , 2004, 14, 153-162.	4.5	87
24	Mutations of <i>ousA</i> Alter the Virulence of <i>Erwinia chrysanthemi</i> . <i>Molecular Plant-Microbe Interactions</i> , 2005, 18, 150-157.	1.4	15
25	Recent advances in engineering plant tolerance to abiotic stress: achievements and limitations. <i>Current Opinion in Biotechnology</i> , 2005, 16, 123-132.	3.3	1,299
26	Adaptive responses of <i>Populus kangdingensis</i> to drought stress. <i>Physiologia Plantarum</i> , 2005, 123, 445-451.	2.6	112
27	Comparative analysis of trehalose production by <i>Debaryomyces hansenii</i> and <i>Saccharomyces cerevisiae</i> under saline stress. <i>Extremophiles</i> , 2005, 9, 7-16.	0.9	33
28	<i>Sorghum bicolor</i> â€™s Transcriptome Response to Dehydration, High Salinity and ABA. <i>Plant Molecular Biology</i> , 2005, 58, 699-720.	2.0	262
29	Halotolerant Cyanobacterium <i>Aphanothece halophytica</i> Contains NapA-Type Na <sup>+</sup> /H <sup>+</sup> Antiporters with Novel Ion Specificity That Are Involved in Salt Tolerance at Alkaline pH. <i>Applied and Environmental Microbiology</i> , 2005, 71, 4176-4184.	1.4	39
30	Genes for direct methylation of glycine provide high levels of glycinebetaine and abiotic-stress tolerance in <i>Synechococcus</i> and <i>Arabidopsis</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1318-1323.	3.3	194
31	Drought resistance, water-use efficiency, and yield potentialâ€“are they compatible, dissonant, or mutually exclusive?. <i>Australian Journal of Agricultural Research</i> , 2005, 56, 1159.	1.5	1,080
32	A Structural Model for the Osmosensor, Transporter, and Osmoregulator ProP of <i>Escherichia coli</i> â€. <i>Biochemistry</i> , 2005, 44, 5634-5646.	1.2	44
33	Regeneration of cryoresistance of in vitro rumen ciliate cultures. <i>Cryobiology</i> , 2005, 51, 76-84.	0.3	10
34	Cold, salinity and drought stresses: An overview. <i>Archives of Biochemistry and Biophysics</i> , 2005, 444, 139-158.	1.4	2,295
35	Organic compatible solutes of halotolerant and halophilic microorganisms. <i>Saline Systems</i> , 2005, 1, 5.	2.0	565
36	Drought and Salt Tolerance in Plants. <i>Critical Reviews in Plant Sciences</i> , 2005, 24, 23-58.	2.7	2,081
37	Stress Signal Transduction: components, pathways and network integration. , 2006, , 3-29.		11

#	ARTICLE	IF	CITATIONS
38	Metabolite Profiling of Wheat Grains ( <i>Triticum aestivum</i> L.) from Organic and Conventional Agriculture. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 8301-8306.	2.4	98
39	Engineering for biosynthesis of ectoine (2-methyl 4-carboxy tetrahydro pyrimidine) in tobacco chloroplasts leads to accumulation of ectoine and enhanced salinity tolerance. <i>Plant Science</i> , 2006, 170, 291-306.	1.7	10
41	Salt Tolerance. , 2006, , 206-224.		29
42	Solute Accumulation as a Cause for Quality Losses in Sugar Beet Submitted to Continuous and Temporary Drought Stress. <i>Journal of Agronomy and Crop Science</i> , 2006, 192, 17-24.	1.7	32
43	Characterization of salt tolerance in ectoine-transformed tobacco plants ( <i>Nicotiana tabacum</i> ): photosynthesis, osmotic adjustment, and nitrogen partitioning. <i>Plant, Cell and Environment</i> , 2006, 29, 173-182.	2.8	47
44	Organ-specific adaptation to low precipitation in solute concentration of sugar beet ( <i>Beta vulgaris</i> ) Tj ETQq1 1 0.784314 rgBTJ/Overlo	1.9	26
45	Understanding regulatory networks and engineering for enhanced drought tolerance in plants. <i>Current Opinion in Plant Biology</i> , 2006, 9, 189-195.	3.5	695
46	Tomato QM-Like Protein Protects <i>Saccharomyces cerevisiae</i> Cells against Oxidative Stress by Regulating Intracellular Proline Levels. <i>Applied and Environmental Microbiology</i> , 2006, 72, 4001-4006.	1.4	79
47	Halotolerant Cyanobacterium <i>Aphanothece halophytica</i> Contains a Betaine Transporter Active at Alkaline pH and High Salinity. <i>Applied and Environmental Microbiology</i> , 2006, 72, 6018-6026.	1.4	52
48	Evaluation of the stress-inducible production of choline oxidase in transgenic rice as a strategy for producing the stress-protectant glycine betaine. <i>Journal of Experimental Botany</i> , 2006, 57, 1129-1135.	2.4	150
50	Metabolic engineering of glycinebetaine. , 2006, , 137-151.		31
51	Metabolic Engineering for Betaine Accumulation in Microbes and Plants. <i>Journal of Biological Chemistry</i> , 2007, 282, 34185-34193.	1.6	73
52	Endogenously Synthesized (â <sup>+</sup> )- <i>proto</i> -Quercitol and Glycine Betaine Are Principal Compatible Solutes of <i>Schizochytrium</i> sp. Strain S8 (ATCC 20889) and Three New Isolates of Phylogenetically Related Thraustochytrids. <i>Applied and Environmental Microbiology</i> , 2007, 73, 5848-5856.	1.4	38
53	Choline. , 2007, , .		2
54	Biochemical characterization of early and late bud flushing in common ash ( <i>Fraxinus excelsior</i> L.). <i>Plant Science</i> , 2007, 172, 962-969.	1.7	32
55	Alteration of oxidative and carbohydrate metabolism under abiotic stress in two rice ( <i>Oryza sativa</i> L.) genotypes contrasting in chilling tolerance. <i>Journal of Plant Physiology</i> , 2007, 164, 157-167.	1.6	215
56	Structure and Function of Transmembrane Segment XII in Osmosensor and Osmoprotectant Transporter ProP of <i>Escherichia coli</i> . <i>Biochemistry</i> , 2007, 46, 5647-5655.	1.2	19
57	Current Status Of Breeding Tomatoes For Salt And Drought Tolerance. , 2007, , 669-700.		22

#	ARTICLE	IF	CITATIONS
58	Osmoadaptation of haloalkaliphilic bacteria: Role of osmoregulators and their possible practical application. <i>Microbiology</i> , 2007, 76, 511-522.	0.5	33
59	Roles of glycine betaine and proline in improving plant abiotic stress resistance. <i>Environmental and Experimental Botany</i> , 2007, 59, 206-216.	2.0	3,403
60	Heat tolerance in plants: An overview. <i>Environmental and Experimental Botany</i> , 2007, 61, 199-223.	2.0	2,804
61	Transformed tobacco plants with increased tolerance to drought. <i>South African Journal of Botany</i> , 2007, 73, 505-511.	1.2	46
62	Drought Tolerance and Antioxidant Activities in Lavender Plants Colonized by Native Drought-tolerant or Drought-sensitive <i>Glomus</i> Species. <i>Microbial Ecology</i> , 2007, 54, 543-552.	1.4	182
63	Changes in photosynthesis, xanthophyll cycle, and sugar accumulation in two North Australia tropical species differing in leaf angles. <i>Photosynthetica</i> , 2007, 45, .	0.9	24
64	Expression of TERF1 in rice regulates expression of stress-responsive genes and enhances tolerance to drought and high-salinity. <i>Plant Cell Reports</i> , 2008, 27, 1787-1795.	2.8	85
65	Effect of CaCl <sub>2</sub> treatment on the changing of drought related physiological and biochemical indexes of <i>Brassica napus</i> . <i>Frontiers of Agriculture in China</i> , 2008, 2, 423-427.	0.2	6
66	Osmoprotectants enhance methane production from the anaerobic digestion of food wastes containing a high content of salt. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 1204-1210.	1.6	60
67	Effects of water stress and high temperature on photosynthetic rates of two species of <i>Prosopis</i> . <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2008, 92, 67-76.	1.7	23
68	Virus infection improves drought tolerance. <i>New Phytologist</i> , 2008, 180, 911-921.	3.5	348
69	Salinity and its effects on the functional biology of legumes. <i>Acta Physiologiae Plantarum</i> , 2008, 30, 595-618.	1.0	284
70	Genetic Engineering for Salinity Stress Tolerance. <i>Advances in Plant Biochemistry and Molecular Biology</i> , 2008, , 347-384.	0.5	13
71	Role of Glu312 in Binding and Positioning of the Substrate for the Hydride Transfer Reaction in Choline Oxidase<sup></sup>. <i>Biochemistry</i> , 2008, 47, 243-256.	1.2	82
72	Growth characteristics and antioxidant metabolism of moongbean genotypes differing in photosynthetic capacity subjected to water deficit stress. <i>Journal of Plant Interactions</i> , 2008, 3, 127-136.	1.0	16
74	Principal Transcriptional Programs Regulating Plant Amino Acid Metabolism in Response to Abiotic Stresses Å Å. <i>Plant Physiology</i> , 2008, 147, 316-330.	2.3	255
75	Accumulation of pinitol and other soluble sugars in waterâ€stressed phyllodes of tropical <i>Acacia auriculiformis</i> in northern Australia. <i>New Zealand Journal of Botany</i> , 2008, 46, 119-126.	0.8	11
76	Wild plant resources for studying molecular mechanisms of drought/strong light stress tolerance. <i>Plant Biotechnology</i> , 2008, 25, 257-263.	0.5	44

#	ARTICLE	IF	CITATIONS
77	Contribution of Flavin Covalent Linkage with Histidine 99 to the Reaction Catalyzed by Choline Oxidase. <i>Journal of Biological Chemistry</i> , 2009, 284, 16990-16997.	1.6	24
78	Abscisic acid has contrasting effects on salt excretion and polyamine concentrations of an inland and a coastal population of the Mediterranean xero-halophyte species <i>Atriplex halimus</i> . <i>Annals of Botany</i> , 2009, 104, 925-936.	1.4	47
79	Peroxisome Biogenesis and Function. <i>The Arabidopsis Book</i> , 2009, 7, e0123.	0.5	95
80	Functional Characterization of Phospholipid N-Methyltransferases from <i>Arabidopsis</i> and Soybean. <i>Journal of Biological Chemistry</i> , 2009, 284, 15439-15447.	1.6	41
81	A reassessment of the prevalent organic solutes constitutively accumulated and potentially involved in osmotic adjustment in pear leaves. <i>Environmental and Experimental Botany</i> , 2009, 66, 230-241.	2.0	24
82	Recent developments in understanding salinity tolerance. <i>Environmental and Experimental Botany</i> , 2009, 67, 2-9.	2.0	465
83	The osmolyte betaine promotes protein misfolding and disruption of protein aggregates. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009, 75, 509-517.	1.5	64
84	Preferential accumulation of betaine uncoupled to choline monooxygenase in young leaves of sugar beet "Importance of long-distance translocation of betaine under normal and salt-stressed conditions. <i>Journal of Plant Physiology</i> , 2009, 166, 2058-2070.	1.6	47
85	Recent Advances in Plant Biotechnology. , 2009, , .		16
86	Genotypic differences in plant growth, osmotic and antioxidative defence of <i>Cajanus cajan</i> (L.) Millsp. modulated by salt stress. <i>Archives of Agronomy and Soil Science</i> , 2009, 55, 3-33.	1.3	12
87	Proline metabolism in senescing rose petals ( <i>Rosa hybrida</i> L. "First Red"™). <i>Journal of Horticultural Science and Biotechnology</i> , 2009, 84, 536-540.	0.9	11
88	Transgenic <i>Brassica chinensis</i> plants expressing a bacterial <i>codA</i> gene exhibit enhanced tolerance to extreme temperature and high salinity. <i>Journal of Zhejiang University: Science B</i> , 2010, 11, 851-861.	1.3	35
89	Induction of salt tolerance in <i>Azolla microphylla</i> Kaulf through modulation of antioxidant enzymes and ion transport. <i>Protoplasma</i> , 2010, 245, 105-111.	1.0	20
90	Overexpression of osmotin gene confers tolerance to salt and drought stresses in transgenic tomato ( <i>Solanum lycopersicum</i> L.). <i>Protoplasma</i> , 2010, 245, 133-141.	1.0	127
91	Metabolome and water homeostasis analysis of <i>Thellungiella salsuginea</i> suggests that dehydration tolerance is a key response to osmotic stress in this halophyte. <i>Plant Journal</i> , 2010, 64, 215-229.	2.8	174
92	Identification of Phosphomethylethanolamine N-Methyltransferase from <i>Arabidopsis</i> and Its Role in Choline and Phospholipid Metabolism. <i>Journal of Biological Chemistry</i> , 2010, 285, 29147-29155.	1.6	33
93	Osmotically induced synthesis of the dipeptide N-acetylglutamylglutamine amide is mediated by a new pathway conserved among bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 12652-12657.	3.3	58
94	Genetic Engineering for Modern Agriculture: Challenges and Perspectives. <i>Annual Review of Plant Biology</i> , 2010, 61, 443-462.	8.6	902

#	ARTICLE	IF	CITATIONS
95	Exogenous proline alleviates oxidative stress and increase vase life in rose ( <i>Rosa hybrida</i> L. â€Grand) Tj ETQq0 0 0 rgBT /Overlock 10 Tf .	1.7	35
96	Irrigation restriction effects on water use efficiency and osmotic adjustment in Aloe Vera plants ( <i>Aloe barbadensis</i> Miller). <i>Agricultural Water Management</i> , 2010, 97, 1564-1570.	2.4	36
97	Nitrogen in Relation to Photosynthetic Capacity and Accumulation of Osmoprotectant and Nutrients in Brassica Genotypes Grown Under Salt Stress. <i>Agricultural Sciences in China</i> , 2010, 9, 671-680.	0.6	49
98	MÃ©canismes et stratÃ©gies cellulaires de tolÃ©rance Ã la salinitÃ© (NaCl) chez les plantes. <i>Environmental Reviews</i> , 2011, 19, 121-140.	2.1	14
99	Plants in Extreme Environments. <i>Advances in Botanical Research</i> , 2011, 57, 105-150.	0.5	48
100	Increased salt and drought tolerance by d-ononitol production in transgenic <i>Arabidopsis thaliana</i> . <i>Biochemical and Biophysical Research Communications</i> , 2011, 415, 669-674.	1.0	44
101	Drought Tolerance. <i>Advances in Agronomy</i> , 2011, , 249-296.	2.4	124
102	Physiological responses of <i>Chenopodium quinoa</i> to salt stress. <i>International Journal of Plant Physiology and Biochemistry</i> , 2011, 3, .	1.0	5
103	Gas exchange and JIP-test parameters of two Mediterranean maquis species are affected by sea spray and ozone interaction. <i>Environmental and Experimental Botany</i> , 2011, 73, 80-88.	2.0	24
104	Non-protein amino acids: plant, soil and ecosystem interactions. <i>Plant and Soil</i> , 2011, 342, 31-48.	1.8	122
105	Biochemical Effect of Carbaryl on Oxidative stress, Antioxidant enzymes and Osmolytes of Cyanobacterium <i>Calothrix brevisissima</i> . <i>Bulletin of Environmental Contamination and Toxicology</i> , 2011, 87, 615-620.	1.3	20
106	Transgenic Strategies Toward the Development of Salt-Tolerant Plants. , 2011, , 235-274.		4
107	Polyols as biomarkers and bioindicators for 21st century plant breeding. <i>Functional Plant Biology</i> , 2011, 38, 934.	1.1	38
108	Sustainable Potato Production: Global Case Studies. , 2012, , .		22
109	Amino Acid Residues Critical for the Specificity for Betaine Aldehyde of the Plant ALDH10 Isoenzyme Involved in the Synthesis of Glycine Betaine Â. <i>Plant Physiology</i> , 2012, 158, 1570-1582.	2.3	45
110	Overexpression of Rab16 Gene in indica rice variety for generating enhanced salt tolerance. <i>Plant Signaling and Behavior</i> , 2012, 7, 502-509.	1.2	69
111	Influence of salt stress on growth, pigments, soluble sugars and ion accumulation in three pistachio cultivars. <i>Journal of Medicinal Plants Research</i> , 2012, 6, .	0.2	22
112	Engineering of betaine biosynthesis and transport for abiotic stress tolerance in plants. <i>Journal of Plant Biochemistry and Biotechnology</i> , 2012, 21, 58-62.	0.9	10

#	ARTICLE	IF	CITATIONS
113	Metabolic and Phenotypic Responses of Greenhouse-Grown Maize Hybrids to Experimentally Controlled Drought Stress. <i>Molecular Plant</i> , 2012, 5, 401-417.	3.9	251
114	Targeting metabolic pathways for genetic engineering abiotic stress-tolerance in crops. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2012, 1819, 186-194.	0.9	122
115	Transgenic plants for abiotic stress tolerance: current status. <i>Archives of Agronomy and Soil Science</i> , 2012, 58, 693-721.	1.3	31
116	Anabaena sp. PCC7120 transformed with glycine methylation genes from <i>Aphanothece halophytica</i> synthesized glycine betaine showing increased tolerance to salt. <i>Archives of Microbiology</i> , 2012, 194, 909-914.	1.0	25
120	Responses and Management of Heat Stress in Plants. , 2012, , 135-157.		23
121	Water Deficit Condition Affecting Rice Production – Challenges and Prospects. , 0, , .		2
122	The studying effect of drought stress on germination, proline, sugar, lipid, protein and chlorophyll content in purslane ( <i>Portulaca oleracea</i> L.) leaves. <i>Journal of Medicinal Plants Research</i> , 2012, 6, .	0.2	21
123	Abiotic Stress Responses in Plants: Present and Future. , 2012, , 1-19.		111
124	Overexpression of serine hydroxymethyltransferase from halotolerant cyanobacterium in <i>Escherichia coli</i> results in increased accumulation of choline precursors and enhanced salinity tolerance. <i>FEMS Microbiology Letters</i> , 2012, 333, 46-53.	0.7	23
125	Metabolite profiling of the moss <i>Physcomitrella patens</i> reveals evolutionary conservation of osmoprotective substances. <i>Plant Cell Reports</i> , 2012, 31, 427-436.	2.8	78
126	Role of Secondary Metabolites and Brassinosteroids in Plant Defense Against Environmental Stresses. <i>Journal of Plant Growth Regulation</i> , 2013, 32, 216-232.	2.8	334
127	Plant Acclimation to Environmental Stress. , 2013, , .		13
128	Expression dynamics and genome distribution of osmoprotectants in soybean: identifying important components to face abiotic stress. <i>BMC Bioinformatics</i> , 2013, 14, S7.	1.2	32
129	A chemical complementation approach reveals genes and interactions of flavonoids with other pathways. <i>Plant Journal</i> , 2013, 74, 383-397.	2.8	74
130	Effect of genotype, environment and genotype-by-environment interaction on metabolite profiling in durum wheat ( <i>Triticum durum</i> Desf.) grain. <i>Journal of Cereal Science</i> , 2013, 57, 183-192.	1.8	63
131	Potentials and limitations of biomethane and phosphorus recovery from sludges of brackish/marine aquaculture recirculation systems: A review. <i>Journal of Environmental Management</i> , 2013, 131, 44-54.	3.8	37
132	Enhanced tolerance of transgenic potato plants expressing choline oxidase in chloroplasts against water stress. , 2013, 54, 30.		34
133	Insights into genomics of salt stress response in rice. <i>Rice</i> , 2013, 6, 27.	1.7	210



#	ARTICLE	IF	CITATIONS
134	Metabolomic Profiling in <i>Selaginella lepidophylla</i> at Various Hydration States Provides New Insights into the Mechanistic Basis of Desiccation Tolerance. <i>Molecular Plant</i> , 2013, 6, 369-385.	3.9	117
135	Osmoprotectants: Potential for Crop Improvement Under Adverse Conditions. , 2013, , 197-232.		60
136	The freshwater cyanobacterium <i>Anabaena doliolum</i> transformed with ApGSMT-DMT exhibited enhanced salt tolerance and protection to nitrogenase activity, but became halophilic. <i>Microbiology (United Kingdom)</i> , 2013, 159, 641-648.	0.7	21
137	Role of DREB-Like Proteins in Improving Stress Tolerance of Transgenic Crops. , 2013, , 147-161.		3
138	Photosynthesis in Nature: A New Look. <i>Environmental Science and Engineering</i> , 2013, , 561-686.	0.1	6
139	Effect of plant growth promoting substances from rhizo- and cyano-bacteria on sugarbeet growth, yield and yield quality in saline soil. <i>International Journal of Academic Research</i> , 2013, 5, 58-65.	0.1	1
140	Changes in Secondary Metabolite Production in <i>Jatropha curcas</i> Calluses Treated with NaCl. <i>Analytical Chemistry Letters</i> , 2013, 3, 359-369.	0.4	1
141	Strategies of Salt Tolerance in the Rhizobia-Legume Symbiosis. , 2013, , 99-121.		6
142	Phytotoxicity of Sodium Chloride Towards Common Duckweed ( <i>Lemna Minor</i> L.) and Yellow Lupin ( <i>Lupinus Luteus</i> L.). <i>Archives of Environmental Protection</i> , 2013, 39, 117-128.	1.1	22
143	Efficiency of yeast in enhancement of the oxidative defense system in salt-stressed flax seedlings. <i>Acta Biologica Hungarica</i> , 2013, 64, 118-130.	0.7	4
144	Detection of drought tolerant sugarcane genotypes ( <i>Saccharum officinarum</i> ) using lipid peroxidation, antioxidant activity, glycine-betaine and proline contents. <i>Journal of Soil Science and Plant Nutrition</i> , 2014, , 0-0.	1.7	22
145	De novo assembly and characterization of stress transcriptome and regulatory networks under temperature, salt and hormone stresses in <i>Lilium lancifolium</i> . <i>Molecular Biology Reports</i> , 2014, 41, 8231-8245.	1.0	27
146	Seed halopriming outdo hydropriming in enhancing seedling vigor and osmotic stress tolerance potential of rice varieties. <i>Journal of Crop Science and Biotechnology</i> , 2014, 17, 209-219.	0.7	26
147	Osmolyte Dynamics. , 2014, , 405-430.		7
148	Breeding and Transgenic Approaches for Development of Abiotic Stress Tolerance in Rice. , 2014, , 153-190.		1
149	Targeting of Metabolic Pathways for Genetic Engineering to Combat Abiotic Stress Tolerance in Crop Plants. , 2014, , 23-37.		3
150	Influence of abiotic stresses on plant proteome and metabolome changes. <i>Acta Physiologiae Plantarum</i> , 2014, 36, 1-19.	1.0	263
151	Ascorbate metabolism in rice genotypes differing in zinc efficiency. <i>Planta</i> , 2014, 239, 367-379.	1.6	33

#	ARTICLE	IF	CITATIONS
152	Physiological Mechanisms and Adaptation Strategies in Plants Under Changing Environment. , 2014, , .		13
153	Improvement of Crops in the Era of Climatic Changes. , 2014, , .		12
154	Gamma radiation, in vitro selection for salt (NaCl) tolerance, and characterization of mutants in sugarcane ( <i>Saccharum officinarum</i> L.). <i>In Vitro Cellular and Developmental Biology - Plant</i> , 2014, 50, 766-776.	0.9	27
155	Effect of Nitrogen Nutrition on Solute Accumulation and Ion Contents of Maize under Sodium Chloride Stress. <i>Communications in Soil Science and Plant Analysis</i> , 2014, 45, 86-100.	0.6	2
156	Trehalose Metabolism-Related Genes in Maize. <i>Journal of Plant Growth Regulation</i> , 2014, 33, 256-271.	2.8	20
157	Transgenic <i>Arabidopsis</i> expressing osmolyte glycine betaine synthesizing enzymes from halophilic methanogen promote tolerance to drought and salt stress. <i>Plant Molecular Biology</i> , 2014, 85, 429-441.	2.0	31
158	ROS Production, Scavenging, and Signaling under Salinity Stress. , 2015, , 202-221.		4
159	IMPACT OF FOLIAR APPLICATION OF ASCORBIC ACID AND Î±-TOCOPHEROL ON ANTIOXIDANT ACTIVITY AND SOME BIOCHEMICAL ASPECTS OF FLAX CULTIVARS UNDER SALINITY STRESS. <i>Acta Biologica Colombiana</i> , 2015, 20, .	0.1	23
160	Metabolic engineering of the chloroplast genome reveals that the yeast ArDH gene confers enhanced tolerance to salinity and drought in plants. <i>Frontiers in Plant Science</i> , 2015, 6, 725.	1.7	30
161	Review of recent transgenic studies on abiotic stress tolerance and future molecular breeding in potato. <i>Breeding Science</i> , 2015, 65, 85-102.	0.9	49
162	The Omics of Cold Stress Responses in Plants. , 2015, , 143-194.		14
163	Salt Stress in Higher Plants: Mechanisms of Toxicity and Defensive Responses. , 2015, , 1-33.		9
164	Elucidation of Abiotic Stress Signaling in Plants. , 2015, , .		12
165	In planta transformation of sorghum ( <i>Sorghum bicolor</i> (L.) Moench) using TPS1 gene for enhancing tolerance to abiotic stresses. <i>Journal of Genetics</i> , 2015, 94, 425-434.	0.4	17
166	Suppressed expression of choline monooxygenase in sugar beet on the accumulation of glycine betaine. <i>Plant Physiology and Biochemistry</i> , 2015, 96, 217-221.	2.8	30
167	Abiotic Stress Tolerance and Sustainable Agriculture: A Functional Genomics Perspective. , 2015, , 439-472.		4
168	Identification of conserved drought-adaptive genes using a cross-species meta-analysis approach. <i>BMC Plant Biology</i> , 2015, 15, 111.	1.6	90
169	Recent Advancements in Gene Expression and Enabling Technologies in Crop Plants. , 2015, , .		6

#	ARTICLE	IF	CITATIONS
170	Nitric Oxide in Drought Stress Signalling and Tolerance in Plants. , 2015, , 95-114.		8
171	Nitric Oxide Action in Abiotic Stress Responses in Plants. , 2015, , .		13
172	Dissection of jasmonate functions in tomato stamen development by transcriptome and metabolome analyses. BMC Biology, 2015, 13, 28.	1.7	34
173	OsBAT1 Augments Salinity Stress Tolerance by Enhancing Detoxification of ROS and Expression of Stress-Responsive Genes in Transgenic Rice. Plant Molecular Biology Reporter, 2015, 33, 1192-1209.	1.0	12
174	A New Insight of Salt Stress Signaling in Plant. Molecules and Cells, 2016, 39, 447-459.	1.0	230
175	Quantitative comparison of ammonia and 3-indoleacetic acid production in halophilic, alkalophilic and haloalkalophilic bacterial isolates in soil. Journal of Fundamental and Applied Sciences, 2016, 8, 653.	0.2	2
176	Water Deficit Affects Primary Metabolism Differently in Two Lolium multiflorum/Festuca arundinacea Introgression Forms with a Distinct Capacity for Photosynthesis and Membrane Regeneration. Frontiers in Plant Science, 2016, 7, 1063.	1.7	24
177	Drought Stress Tolerance in Plants: Insights from Metabolomics. , 2016, , 187-216.		18
179	Physiological response of lupine and associated weeds grown at salt-affected soil to Î±-tocopherol and hoeing treatments. Gesunde Pflanzen, 2016, 68, 117-127.	1.7	10
180	Mass spectrometry-based plant metabolomics: Metabolite responses to abiotic stress. Mass Spectrometry Reviews, 2016, 35, 620-649.	2.8	254
181	Trehalose pretreatment induces drought tolerance in radish (Raphanus sativus L.) plants: some key physio-biochemical traits. Acta Physiologiae Plantarum, 2016, 38, 1.	1.0	47
182	Alleviation of the adverse effects of salinity stress using trehalose in two rice varieties. South African Journal of Botany, 2016, 103, 275-282.	1.2	92
183	Osmolyte Accumulation and Implications in Plant Abiotic Stress Tolerance. , 2016, , 1-12.		37
184	Metabolic Engineering of Compatible Solute Trehalose for Abiotic Stress Tolerance in Plants. , 2016, , 83-96.		14
185	Roles of Osmolytes in Plant Adaptation to Drought and Salinity. , 2016, , 37-68.		51
186	Drought Stress in Grain Legumes during Reproduction and Grain Filling. Journal of Agronomy and Crop Science, 2017, 203, 81-102.	1.7	293
187	Ethanolamine induced modification in glycine betaine and proline metabolism in Nicotiana rustica under salt stress. Biologia Plantarum, 2017, 61, 797-800.	1.9	9
188	Cellular Osmolytes. , 2017, , .		5

#	ARTICLE	IF	CITATIONS
189	Impact of Osmolytes in Conformational Modulation of Protein and Its Applications in Biotechnology. , 2017, , 143-160.		3
190	Isolation and functional characterization of 3-phosphoglycerate dehydrogenase involved in salt responses in sugar beet. <i>Protoplasma</i> , 2017, 254, 2305-2313.	1.0	17
191	Transgenic approaches to enhance salt and drought tolerance in plants. <i>Plant Gene</i> , 2017, 11, 219-231.	1.4	36
192	Physiological investigation of C 4 -phosphoenolpyruvate-carboxylase-introduced rice line shows that sucrose metabolism is involved in the improved drought tolerance. <i>Plant Physiology and Biochemistry</i> , 2017, 115, 328-342.	2.8	28
193	Effects of zeolite and water stress on growth, yield and chemical compositions of Aloe vera L.. <i>Agricultural Water Management</i> , 2017, 181, 66-72.	2.4	76
194	Climate Change and Consequences for Potato Production: a Review of Tolerance to Emerging Abiotic Stress. <i>Potato Research</i> , 2017, 60, 239-268.	1.2	50
195	Proteome analysis of <i>Lilium lancifolium</i> in response to cold stress and abscisic acid induction. <i>Acta Horticulturae</i> , 2017, , 163-174.	0.1	1
196	Cultivar Diversity of Grape Skin Polyphenol Composition and Changes in Response to Drought Investigated by LC-MS Based Metabolomics. <i>Frontiers in Plant Science</i> , 2017, 8, 1826.	1.7	77
197	Response of proline accumulation in bread wheat ( <i>Triticum aestivum</i> L.) under rainfed conditions. <i>J Agricultural Meteorology</i> , 2017, 73, 147-155.	0.8	14
198	Effects of Al <sup>3+</sup> and La <sup>3+</sup> Trivalent Metal Ions on Tomato Fruit Proteomes. <i>Proteomes</i> , 2017, 5, 7.	1.7	3
199	Bridging the Rice Yield Gaps under Drought: QTLs, Genes, and their Use in Breeding Programs. <i>Agronomy</i> , 2017, 7, 27.	1.3	87
200	Biosynthetic pathways of glycinebetaine in <i>Thalassiosira pseudonana</i> ; functional characterization of enzyme catalyzing three-step methylation of glycine. <i>Plant Physiology and Biochemistry</i> , 2018, 127, 248-255.	2.8	21
201	Single-Gene Versus Multigene Transfer Approaches for Crop Salt Tolerance. , 2018, , 359-379.		1
202	Nitrogen nutrition and adaptation of glycophytes to saline environment: a review. <i>Archives of Agronomy and Soil Science</i> , 2018, 64, 1181-1206.	1.3	34
203	Pi starvation-dependent regulation of ethanolamine metabolism by phosphoethanolamine phosphatase PECP1 in <i>Arabidopsis</i> roots. <i>Journal of Experimental Botany</i> , 2018, 69, 467-481.	2.4	24
204	Stress Physiology of Tea in the Face of Climate Change. , 2018, , .		12
205	Role of Compatible Solutes in Enhancing Antioxidative Defense in Plants Exposed to Metal Toxicity. , 2018, , 207-228.		14
206	Response of Tea Plants to Drought Stress. , 2018, , 63-81.		3

#	ARTICLE	IF	CITATIONS
207	Metabolic fingerprinting analysis of oil palm reveals a set of differentially expressed metabolites in fatal yellowing symptomatic and non-symptomatic plants. <i>Metabolomics</i> , 2018, 14, 142.	1.4	14
208	Increased salt and drought tolerance by D-pinitol production in transgenic <i>Arabidopsis thaliana</i> . <i>Biochemical and Biophysical Research Communications</i> , 2018, 504, 315-320.	1.0	32
209	Microbial Bioprospecting for Sustainable Development. , 2018, , .		13
210	Insight into Compatible Solutes from Halophiles: Exploring Significant Applications in Biotechnology. , 2018, , 291-307.		8
211	Nutrient accumulation in four ornamental tree species under saline stress conditions. <i>Journal of Plant Nutrition</i> , 2018, 41, 1724-1733.	0.9	1
212	Methyl jasmonate alleviates drought stress in young sugar beet ( <i>Beta vulgaris</i> L.) plants. <i>Journal of Agronomy and Crop Science</i> , 2018, 204, 566-576.	1.7	41
213	A study on cassava tolerance to and growth responses under salt stress. <i>Environmental and Experimental Botany</i> , 2018, 155, 429-440.	2.0	27
214	Transgenic Research in Tuber and Root Crops. , 2018, , 225-248.		2
215	Effect of nitrogen source and oxygen deficiency on carbon metabolism and antioxidant system of rubber tree plants ( <i>Hevea</i> spp.). <i>Australian Journal of Crop Science</i> , 2018, 12, 116-125.	0.1	4
216	Responses of Four Rice Varieties to Elevated CO <sub>2</sub> and Different Salinity Levels. <i>Rice Science</i> , 2018, 25, 142-151.	1.7	19
217	Metabolomic Approach to Understand Plant Adaptations to Water and Salt Stress. , 2018, , 133-144.		9
218	Comparative physiological and metabolomics analysis of wheat ( <i>Triticum aestivum</i> L.) following post-anthesis heat stress. <i>PLoS ONE</i> , 2018, 13, e0197919.	1.1	74
219	Silicon application positively alters pollen grain area, osmoregulation and antioxidant enzyme activities in wheat plants under water deficit conditions. <i>Journal of Plant Nutrition</i> , 2019, 42, 2121-2132.	0.9	15
221	Expression and functional characterization of sugar beet phosphoethanolamine/phosphocholine phosphatase under salt stress. <i>Plant Physiology and Biochemistry</i> , 2019, 142, 211-216.	2.8	3
222	Tackling Salinity in Sustainable Agriculture—What Developing Countries May Learn from Approaches of the Developed World. <i>Sustainability</i> , 2019, 11, 4558.	1.6	46
225	Morphological-physiological and biochemical responses of Rosemary ( <i>Rosmarinus officinalis</i> ) to salt stress. <i>Materials Today: Proceedings</i> , 2019, 13, 752-761.	0.9	6
226	Functional Characterization and Evolutionary Analysis of Glycine-Betaine Biosynthesis Pathway in Red Seaweed <i>Pyropia yezoensis</i> . <i>Marine Drugs</i> , 2019, 17, 70.	2.2	14
227	Proline-mediated changes in antioxidant enzymatic activities and the physiology of sugar beet under drought stress. <i>Acta Physiologiae Plantarum</i> , 2019, 41, 1.	1.0	78

#	ARTICLE	IF	CITATIONS
228	Salinity stress in cotton: effects, mechanism of tolerance and its management strategies. <i>Physiology and Molecular Biology of Plants</i> , 2019, 25, 807-820.	1.4	75
229	Rational metabolic engineering for enhanced alpha-tocopherol production in <i>Helianthus annuus</i> cell culture. <i>Biochemical Engineering Journal</i> , 2019, 151, 107256.	1.8	14
230	Improving Potato Stress Tolerance and Tuber Yield Under a Climate Change Scenario – A Current Overview. <i>Frontiers in Plant Science</i> , 2019, 10, 563.	1.7	167
231	Integrative meta-analysis of transcriptomic responses to abiotic stress in cotton. <i>Progress in Biophysics and Molecular Biology</i> , 2019, 146, 112-122.	1.4	53
232	How an ancient, salt-tolerant fruit crop, <i>Ficus carica</i> L., copes with salinity: a transcriptome analysis. <i>Scientific Reports</i> , 2019, 9, 2561.	1.6	26
234	Uptake and toxic effects of triphenyl phosphate on freshwater microalgae <i>Chlorella vulgaris</i> and <i>Scenedesmus obliquus</i> : Insights from untargeted metabolomics. <i>Science of the Total Environment</i> , 2019, 650, 1239-1249.	3.9	45
235	Emerging Role of Osmolytes in Enhancing Abiotic Stress Tolerance in Rice. , 2019, , 677-708.		22
236	Phenotypic and metabolic plasticity shapes life-history strategies under combinations of abiotic stresses. <i>Plant Direct</i> , 2019, 3, e00113.	0.8	39
237	UPLC-MS/MS-based untargeted metabolic profiling reveals changes in chickpea ( <i>Cicer</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2019, 42, 115-132.	2.8	176
238	Hyperosmotic stress in <i>Chlamydomonas</i> induces metabolomic changes in biosynthesis of complex lipids. <i>European Journal of Phycology</i> , 2020, 55, 11-29.	0.9	11
239	Osmoprotection in plants under abiotic stresses: new insights into a classical phenomenon. <i>Planta</i> , 2020, 251, 3.	1.6	174
240	Overexpression of plant ferredoxin-like protein promotes salinity tolerance in rice ( <i>Oryza sativa</i> ). <i>Plant Physiology and Biochemistry</i> , 2020, 155, 136-146.	2.8	17
241	Mechanisms of Genome Protection and Repair. <i>Advances in Experimental Medicine and Biology</i> , 2020, , .	0.8	2
242	Role of osmoprotectants in salinity tolerance in wheat. , 2020, , 93-106.		7
243	Salinity tolerance improvement of in vitro propagated <i>Paulownia tomentosa</i> using proline. <i>Bulletin of the National Research Centre</i> , 2020, 44, .	0.7	6
244	Molecular and functional characterization of major compatible solute in Deep Sea halophilic actinobacteria of active volcanic Barren Island, Andaman and Nicobar Islands, India. , 2020, , 253-267.		0
245	Genotypes with enhanced expressions of acquired tolerance mechanisms showed improved growth under stress. <i>Plant Physiology Reports</i> , 2020, 25, 9-23.	0.7	1
246	Role of osmoprotectants and drought tolerance in wheat. , 2020, , 207-216.		1

#	ARTICLE	IF	CITATIONS
247	Heat stress in cultivated plants: nature, impact, mechanisms, and mitigation strategies—a review. <i>Plant Biosystems</i> , 2021, 155, 211-234.	0.8	123
248	Metabolomics-Assisted Breeding for Crop Improvement: An Emerging Approach. , 2021, , 241-279.		3
249	Involvement of membrane transporters in drought tolerance. , 2021, , 383-399.		2
250	Advances in Sensing, Response and Regulation Mechanism of Salt Tolerance in Rice. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2254.	1.8	37
251	Wheat omics: Classical breeding to new breeding technologies. <i>Saudi Journal of Biological Sciences</i> , 2021, 28, 1433-1444.	1.8	12
252	Responses and Tolerance Mechanisms of Mangrove Trees to the Ambient Salinity along the Egyptian Red Sea Coast. <i>Limnological Review</i> , 2021, 21, 3-13.	0.5	4
253	Bacilli as sources of agrobiotechnology: recent advances and future directions. <i>Green Chemistry Letters and Reviews</i> , 2021, 14, 246-271.	2.1	27
254	Morpho-Physiological Testing of NaCl Sensitivity of Tobacco Plants Overexpressing Choline Oxidase Gene. <i>Plants</i> , 2021, 10, 1102.	1.6	3
255	Understanding the roles of osmolytes for acclimatizing plants to changing environment: a review of potential mechanism. <i>Plant Signaling and Behavior</i> , 2021, 16, 1913306.	1.2	72
256	Significance of brassinosteroids and their derivatives in the development and protection of plants under abiotic stress. <i>Biologia (Poland)</i> , 2021, 76, 2837-2857.	0.8	21
257	Potato Response to Drought Stress: Physiological and Growth Basis. <i>Frontiers in Plant Science</i> , 2021, 12, 698060.	1.7	25
258	Physiological and biochemical responses at leaf and root levels in two Acacia species ( <i>A. cyclops</i> and <i>A. senegalensis</i> ) under drought stress. <i>Journal of Plant Physiology</i> , 2021, 250, 11934.	0.5	0
261	Biotechnology Approaches To Engineering Drought Tolerant Crop. , 2007, , 333-357.		8
262	The Use of Plant Cell Biotechnology for the Production of Phytochemicals. , 2009, , 15-33.		9
263	Importance of Protective Compounds in Stress Tolerance. , 2014, , 265-284.		2
264	Breeding and Biotech Approaches Towards Improving Yield in Soybean. , 2015, , 131-192.		3
265	Mechanisms of Sugar Beet Response to Biotic and Abiotic Stresses. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1241, 167-194.	0.8	10
266	Osmoprotectants in the Sugarcane ( <i>Saccharum spp.</i> ) Transcriptome Revealed by in Silico Evaluation. <i>Lecture Notes in Computer Science</i> , 2011, , 44-58.	1.0	1

#	ARTICLE	IF	CITATIONS
267	Genetics of Osmoadaptation by Accumulation of Compatible Solutes in the Moderate Halophile <i>Chromohalobacter salexigens</i> : Its Potential in Agriculture Under Osmotic Stress Conditions. , 2004, , 135-153.		2
268	Transcriptomic Analysis of Multiple Environmental Stresses in Plants. , 2010, , 511-524.		3
269	Proline Accumulation and Oxidative Stress: Diverse Roles and Mechanism of Tolerance and Adaptation Under Salinity Stress. , 2019, , 269-300.		25
270	Drought and Heat Stress in Cotton ( <i>Gossypium hirsutum</i> L.): Consequences and Their Possible Mitigation Strategies. , 2020, , 613-634.		16
271	Metabolic Engineering of Stress Protectant Secondary Metabolites to Confer Abiotic Stress Tolerance in Plants. <i>Energy, Environment, and Sustainability</i> , 2019, , 207-227.	0.6	4
272	Bacterial Endophytes: Diversity, Functional Importance, and Potential for Manipulation. <i>Rhizosphere Biology</i> , 2021, , 1-49.	0.4	9
273	Physiological and biochemical role of proline, trehalose, and compost on enhancing salinity tolerance of quinoa plant. <i>Bulletin of the National Research Centre</i> , 2020, 44, .	0.7	28
274	Plant Biotechnology for the Production of Natural Products. , 2006, , 221-262.		4
275	Tolerance to Abiotic Stresses. , 2006, , 521-591.		2
276	The effect of salinity stress on survival percentage and physiological characteristics in three varieties of pistachio ( <i>Pistacia vera</i> L). <i>International Journal of Biosciences</i> , 2015, 6, 79-93.	0.4	1
277	Identification of osmoadaptive strategies in the halophile, heterotrophic ciliate <i>Schmidingerothrix salinarum</i> . <i>PLoS Biology</i> , 2018, 16, e2003892.	2.6	51
278	Quantitative proteomics analysis reveals the tolerance of wheat to salt stress in response to <i>Enterobacter cloacae</i> SBP-8. <i>PLoS ONE</i> , 2017, 12, e0183513.	1.1	60
279	Osmotic Adjustment and Yield of Cowpea in Response to Drought Stress and Chitosan. <i>Indian Journal of Applied Research</i> , 2011, 3, 1-6.	0.0	6
280	EFFECT OF DEFICIT IRRIGATION MANAGEMENT ON QUALITATIVE AND QUANTITATIVE YIELD OF SUGAR BEET ( <i>BETA VULGARIS</i> L.) IN KARAJ, IRAN. <i>Applied Ecology and Environmental Research</i> , 2018, 16, 455-466.	0.2	3
281	The Role of Free Proline and Soluble Carbohydrates in Water Gypsum Stress on Some Gypsophyte and Gypsosag Plants. <i>Planta Daninha</i> , 0, 37, .	0.5	3
282	Glycinebetaine improves salt tolerance in vinal ( <i>Prosopis ruscifolia</i> Griesbach) seedlings. <i>Brazilian Journal of Plant Physiology</i> , 2009, 21, 233-241.	0.5	34
283	Analysis of <i>Arabidopsis</i> amino acid metabolism in response to <i>Heterodera schachtii</i> infection. <i>Pakistan Journal of Nematology</i> , 2018, 36, 131-150.	0.3	3
284	Impact of Some Halophytic Extracts on the Antioxidant System of Salt-Stressed Safflower ( <i>Carthamus</i> ) Tj ETQq1 1 0.784314 jgBT /Over	0.0	0



#	ARTICLE	IF	CITATIONS
285	1. Mutation breeding: a powerful approach for obtaining abiotic stress tolerant crops and upgrading food security for human nutrition. , 2014, , 15-36.		3
286	Enhancing Rice Salt Stress Tolerance by Priming with Validamycin A. International Journal of Botany, 2013, 10, 1-12.	0.2	3
287	Growth, Water Status, Physiological, Biochemical and Yield Response of Stay Green Sorghum ( <i>Sorghum bicolor</i> (L.) Moench) Varieties-A Field Trial Under Drought-Prone Area in Amhara Regional State, Ethiopia. Journal of Agronomy, 2015, 14, 188-202.	0.4	64
288	Biomass Accumulation and Proline Content of Six Citrus Rootstocks as Influenced by Long-Term Salinity. Research Journal of Environmental Sciences, 2010, 4, 158-165.	0.5	7
289	Citrus Rootstocks Response to Salinity: Physio-biochemical Parameters Changes. Research Journal of Environmental Sciences, 2014, 8, 29-38.	0.5	5
290	Emerging Role of Metabolic Pathways in Abiotic Stress Tolerance. Journal of Plant Biochemistry & Physiology, 2013, 01, .	0.5	20
291	Water Stress Effects on Leaf Growth and Chlorophyll Content but Not the Grain Yield in Traditional Rice (&lt;i>Oryza sativa&lt;/i>) Genotypes of Assam, India II. Protein and Proline Status in Seedlings under PEG Induced Water Stress. American Journal of Plant Sciences, 2012, 03, 971-980.	0.3	82
292	LC-HRMS Based Non-Targeted Metabolomic Profiling of Wheat (&lt;i>Triticum turgidum&lt;/i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 2017, 08, 3024-3061.	0.3	31
293	Advances in the molecular breeding of forage crops for abiotic stress tolerance. Journal of Plant Biotechnology, 2010, 37, 425-441.	0.1	4
296	Transcriptomics of Sugarcane Osmoprotectants Under Drought. , 0, , .		1
297	Moderately low nitrogen application mitigate the negative effects of salt stress on annual ryegrass seedlings. PeerJ, 2020, 8, e10427.	0.9	13
298	Luobuma ( <i>Apocynum</i> ) â€œ Cash crops for saline lands. Industrial Crops and Products, 2021, 173, 114146.	2.5	6
299	Salt Tolerance in Mungbean <i>Vigna radiata</i> [L.] Genotypes: Role of Proline and Glycinebetaine. Journal of Functional and Environmental Botany, 2011, 1, 139.	0.1	3
300	Enhancing Productivity and Performance of Oil Seed Crops under Environmental Stresses. , 2012, , 139-161.		3
301	Drought and Salinity Tolerance in Transgenic Potato. , 2012, , 373-387.		1
303	Comparative study of salinity effects on ionic balance and compatible solutes in nine Iranian table grape (&lt;i>Vitis vinifera&lt;/i>) genotypes. Oeno One, 2016, 47, 99.	0.7	6
304	Relationship between plant water status and osmotic adjustment in &lt;i>Artemisia ordosica&lt;/i> and &lt;i>Caragana korshinskii&lt;/i> in Mu Us Sandy land, China. Journal of the Japanese Society of Revegetation Technology, 2014, 40, 25-30.	0.0	0
305	Comparative Analysis of Salinity Responsive Candidate Gene Expression in Selected Sri Lankan Rice Varieties. Journal of Food and Agriculture, 2019, 8, 1.	0.2	0

#	ARTICLE	IF	CITATIONS
306	Plant Biotechnology for the Production of Natural Products. , 2016, , 237-278.		1
307	THE BIOACCUMULATION AND METABOLIC EFFECTS OF CIPROFLOXACIN-HCL AND CIPROFLOXACIN FREE BASE IN YELLOW LUPIN ( <i>Lupinus luteus</i> L.) SEEDLINGS. <i>Applied Ecology and Environmental Research</i> , 2017, 15, 1287-1300.	0.2	2
308	Allevation of oxidative stress and increase of vase life by exogenous proline in rose ( <i>Rosa hybrida</i> L.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.0	0
310	Stress Protectant Secondary Metabolites and their Metabolic Engineering to Enhance Abiotic Stress Tolerance in Plants. , 2019, , 197-216.		4
311	Foliar Application of Glycine Betaine and Potassium Silicate and Its Effect on Growth Performance of Jerusalem Artichoke Grown on Calcareous Soil Under Water Stress Conditions. <i>Journal of the Advances in Agricultural Researches</i> , 2020, 25, 14-37.	0.0	0
312	Molecular Characterization of Betaine Aldehyde Dehydrogenase (BADH) Gene and Proline Estimation in <i>Hordeum vulgare</i> L. in Response to Abiotic Stress. <i>Egyptian Academic Journal of Biological Sciences C Physiology and Molecular Biology</i> , 2020, 12, 1-21.	0.0	2
313	Metabolomic profiling of brassinolide and abscisic acid in response to high-temperature stress. <i>Plant Cell Reports</i> , 2022, 41, 935-946.	2.8	5
314	Seed Development, Oil Accumulation and Fatty Acid Composition of Drought Stressed Rapeseed Plants Affected by Salicylic Acid and Putrescine. <i>Gesunde Pflanzen</i> , 2022, 74, 333-345.	1.7	6
315	<i>Thellungiella halophila</i> ST5 improves salt tolerance in cotton. <i>Journal of Cotton Research</i> , 2022, 5, .	1.0	3
316	Strawberry Proteome Responses to Controlled Hot and Cold Stress Partly Mimic Post-harvest Storage Temperature Effects on Fruit Quality. <i>Frontiers in Nutrition</i> , 2021, 8, 812666.	1.6	11
317	Metabolite expression changes in <i>Kappaphycus alvarezii</i> (a red alga) under hypo- and hyper-saline conditions. <i>Algal Research</i> , 2022, 63, 102650.	2.4	10
318	Alteration of proteome in germinating seedlings of pignonpea ( <i>Cajanus cajan</i> ) after salt stress. <i>Physiology and Molecular Biology of Plants</i> , 2021, 27, 2833-2848.	1.4	3
322	Osmoprotectant molecules in cyanobacteria: Their basic features, biosynthetic regulations, and potential applications. , 2022, , 113-123.		3
324	Role of Osmolytes in Enhancement of Plant Abiotic Stress Tolerance. , 2022, , 335-347.		0
325	Improvement of Polyethylene Glycol, Sorbitol, Mannitol, and Sucrose-Induced Osmotic Stress Tolerance through Modulation of the Polyamines, Proteins, and Superoxide Dismutase Activity in Potato. <i>International Journal of Agronomy</i> , 2022, 2022, 1-14.	0.5	1
326	Integrative System Biology Analysis of Transcriptomic Responses to Drought Stress in Soybean ( <i>Glycine max</i> L.). <i>Genes</i> , 2022, 13, 1732.	1.0	6
327	DgCspC gene overexpression improves cotton yield and tolerance to drought and salt stress comparison with wild-type plants. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	3
328	An overview of salinity stress, mechanism of salinity tolerance and strategies for its management in cotton. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	15

#	ARTICLE	IF	CITATIONS
329	Abiotic Stress Resistance in Tobacco: Advances and Strategies. , 2022, , 329-427.		0
331	Effect of water content and biochemical cell state on the germination rate of cryopreserved <i>Butia eriopatha</i> embryos (Arecaceae). <i>Plant Cell, Tissue and Organ Culture</i> , 2023, 152, 339-356.	1.2	2
332	Wheat genotypes with higher yield sensitivity to drought overproduced proline and lost minor biomass under severer water stress. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	3
334	The interactions of iron nutrition, salinity and ultraviolet-B radiation on the physiological responses of wheat ( <i>Triticum aestivum</i> L.). <i>Environmental and Experimental Botany</i> , 2023, 207, 105201.	2.0	1
335	Salt stress proteins in plants: An overview. <i>Frontiers in Plant Science</i> , 0, 13, .	1.7	19
337	Effects of Exogenous Application of 24-Epibrassinolide on Photosynthesis Parameters, Grain Yield, and Protein of Dragon's Head ( <i>Lallemantia iberica</i> ) Under Drought Stress Conditions. <i>Journal of Plant Growth Regulation</i> , 2023, 42, 4453-4465.	2.8	3
338	Role of glycine betaine in the protection of plants against environmental stresses. , 2023, , 127-158.		2
339	Molecular mechanism of drought stress tolerance in barley ( <i>Hordeum vulgare</i> L.) via a combined analysis of the transcriptome data. <i>Czech Journal of Genetics and Plant Breeding</i> , 2023, 59, 76-94.	0.4	2