Mohammad Anwar Hossain

List of Publications by Year
in descending order

67 papers	4,883 citations	279798 23 h-index	377865 34 g-index
76 all docs	76 docs citations	76 times ranked	4713 citing authors

#	Article	IF	Citations
1	Molecular Mechanism of Heavy Metal Toxicity and Tolerance in Plants: Central Role of Glutathione in Detoxification of Reactive Oxygen Species and Methylglyoxal and in Heavy Metal Chelation. Journal of Botany, 2012, 2012, 1-37.	1.2	560
2	Hydrogen peroxide priming modulates abiotic oxidative stress tolerance: insights from ROS detoxification and scavenging. Frontiers in Plant Science, 2015, 6, 420.	3.6	552
3	Plant Response and Tolerance to Abiotic Oxidative Stress: Antioxidant Defense Is a Key Factor. , 2012, , 261-315.		378
4	Nitric oxide modulates antioxidant defense and the methylglyoxal detoxification system and reduces salinity-induced damage of wheat seedlings. Plant Biotechnology Reports, 2011, 5, 353-365.	1.5	366
5	Up-regulation of antioxidant and glyoxalase systems by exogenous glycinebetaine and proline in mung bean confer tolerance to cadmium stress. Physiology and Molecular Biology of Plants, 2010, 16, 259-272.	3.1	327
6	Selenium-Induced Up-Regulation of the Antioxidant Defense and Methylglyoxal Detoxification System Reduces Salinity-Induced Damage in Rapeseed Seedlings. Biological Trace Element Research, 2011, 143, 1704-1721.	3.5	252
7	Exogenous Selenium Pretreatment Protects Rapeseed Seedlings from Cadmium-Induced Oxidative Stress by Upregulating Antioxidant Defense and Methylglyoxal Detoxification Systems. Biological Trace Element Research, 2012, 149, 248-261.	3.5	215
8	Methylglyoxal: An Emerging Signaling Molecule in Plant Abiotic Stress Responses and Tolerance. Frontiers in Plant Science, 2016, 7, 1341.	3.6	185
9	Jacks of metal/metalloid chelation trade in plantsÃ¢â,¬â€an overview. Frontiers in Plant Science, 2015, 6, 192.	3.6	148
10	Physiological and biochemical mechanisms associated with trehalose-induced copper-stress tolerance in rice. Scientific Reports, 2015, 5, 11433.	3.3	141
11	Heat or cold priming-induced cross-tolerance to abiotic stresses in plants: key regulators and possible mechanisms. Protoplasma, 2018, 255, 399-412.	2.1	141
12	Selenium in Higher Plants: Physiological Role, Antioxidant Metabolism and Abiotic Stress Tolerance. Journal of Plant Sciences, 2010, 5, 354-375.	0.2	135
13	Trehalose pretreatment induces salt tolerance in rice (Oryza sativa L.) seedlings: oxidative damage and co-induction of antioxidant defense and glyoxalase systems. Protoplasma, 2015, 252, 461-475.	2.1	134
14	Evidence for a role of exogenous glycinebetaine and proline in antioxidant defense and methylglyoxal detoxification systems in mung bean seedlings under salt stress. Physiology and Molecular Biology of Plants, 2010, 16, 19-29.	3.1	133
15	Salinity Stress in Wheat (Triticum aestivum L.) in the Changing Climate: Adaptation and Management Strategies. Frontiers in Agronomy, 2021, 3, .	3.3	117
16	Phenotypical, physiological and biochemical analyses provide insight into selenium-induced phytotoxicity in rice plants. Chemosphere, 2017, 178, 212-223.	8.2	116
17	Proline Protects Plants Against Abiotic Oxidative Stress. , 2014, , 477-522.		89
18	Coordinate induction of antioxidant defense and glyoxalase system by exogenous proline and glycinebetaine is correlated with salt tolerance in mung bean. Frontiers of Agriculture in China, 2011, 5, 1-14.	0.2	84

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19	Physiological and Biochemical Mechanisms of Nitric Oxide Induced Abiotic Stress Tolerance in Plants. American Journal of Plant Physiology, 2010, 5, 295-324.	0.2	81
20	Exogenous Glutathione Modulates Salinity Tolerance of Soybean [Glycine max (L.) Merrill] at Reproductive Stage. Journal of Plant Growth Regulation, 2017, 36, 877-888.	5.1	69
21	Purification of Glyoxalase I from Onion Bulbs and Molecular Cloning of Its cDNA. Bioscience, Biotechnology and Biochemistry, 2009, 73, 2007-2013.	1.3	67
22	Screening of Salt-Tolerant Rice Landraces by Seedling Stage Phenotyping and Dissecting Biochemical Determinants of Tolerance Mechanism. Journal of Plant Growth Regulation, 2021, 40, 1853-1868.	5.1	56
23	Exogenous Glutathione-Mediated Drought Stress Tolerance in Rice (Oryza sativa L.) is Associated with Lower Oxidative Damage and Favorable Ionic Homeostasis. Iranian Journal of Science and Technology, Transaction A: Science, 2020, 44, 955-971.	1.5	39
24	Heat-shock positively modulates oxidative protection of salt and drought-stressed mustard (Brassica) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.2	33
25	Drought Stress Tolerance in Plants, Vol 2. , 2016, , .		28
26	Genome-wide identification and characterization of the metal tolerance protein (MTP) family in grape (Vitis vinifera L.). 3 Biotech, 2019, 9, 199.	2.2	28
27	Glycinebetaine-Mediated Abiotic Oxidative-Stress Tolerance in Plants: Physiological and Biochemical Mechanisms. , 2017, , 111-133.		24
28	Exogenous putrescine attenuates the negative impact of drought stress by modulating physio-biochemical traits and gene expression in sugar beet (Beta vulgaris L.). PLoS ONE, 2022, 17, e0262099.	2.5	24
29	Drought Stress Tolerance in Plants, Vol 1. , 2016, , .		23
30	Glutathione in Plant Growth, Development, and Stress Tolerance. , 2017, , .		22
31	Transgenic Approaches for Abiotic Stress Tolerance in Crop Plants. , 2016, , 345-396.		21
32	Cross Protection by Cold-shock to Salinity and Drought Stress-induced Oxidative Stress in Mustard (<i>Brassica campestris</i> L.) Seedlings. Molecular Plant Breeding, 0, , .	0.0	20
33	Heavy Metal Stress. , 2016, , 557-583.		18
34	Leaf Proteome Response to Drought Stress and Antioxidant Potential in Tomato (Solanum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142 Tc	2.3	18
35	Lime and Organic Manure Amendment Enhances Crop Productivity of Wheatâ€“Mungbeanâ€“T. Aman Cropping Pattern in Acidic Piedmont Soils. Agronomy, 2021, 11, 1595.	3.0	14
36	Legumes under Drought Stress: Plant Responses, Adaptive Mechanisms, and Management Strategies in Relation to Nitrogen Fixation. , 2021, , 179-207.		13

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37	Hydrogen Peroxide Priming Stimulates Drought Tolerance in Mustard (<i>Brassica) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 7	0.0	12
38	Molecular Breeding for Salt Stress Tolerance in Plants. , 2015, , 306-333.		11
39	Genetic Strategies forÂAdvancing Phytoremediation Potential in Plants. , 2016, , 431-454.		11
40	Mineralization of Farm Manures and Slurries under Aerobic and Anaerobic Conditions for Subsequent Release of Phosphorus and Sulphur in Soil. Sustainability, 2021, 13, 8605.	3.2	10
41	Mineralization of Farm Manures and Slurries for Successive Release of Carbon and Nitrogen in Incubated Soils Varying in Moisture Status under Controlled Laboratory Conditions. Agriculture (Switzerland), 2021, 11, 846.	3.1	10
42	Exogenous Glutathione-Mediated Abiotic Stress Tolerance in Plants. , 2017, , 171-194.		9
43	Arsenic Accumulation in Rice Grain as Influenced by Water Management: Human Health Risk Assessment. Agronomy, 2021, 11, 1741.	3.0	9
44	Breeding Potential of Some Exotic Tomato Lines: A Combined Study of Morphological Variability, Genetic Divergence, and Association of Traits. Phyton, 2022, 91, 97-114.	0.7	8
45	Glyoxalase System and Reactive Oxygen Species Detoxification System in Plant Abiotic Stress Response and Tolerance: An Intimate Relationship. , 2011, , .		6
46	Lime and Organic Manure Amendment: A Potential Approach for Sustaining Crop Productivity of the T. Aman-Maize-Fallow Cropping Pattern in Acidic Piedmont Soils. Sustainability, 2021, 13, 9808.	3.2	6
47	Laboratory-and Field-Phenotyping for Drought Stress Tolerance and Diversity Study in Lentil (Lens) Tj ETQq1 1 0.784314 rgBT /Overlock	0.7	5
48	Phenotyping of mungbean (Vigna radiata L.) genotypes against salt stress and assessment of variability for yield and yield attributing traits. Journal of Plant Stress Physiology, 0, , 7-17.	0.1	5
49	Exogenous Glutathione Improves Salinity Stress Tolerance in Rice (<i>Oryza sativa</i> L.). Plant Gene & Trait, 0, , .	0.0	5
50	Salicylic Acid-Mediated Salt Stress Tolerance in Plants. , 2020, , 1-38.		5
51	The Glyoxalase System: A Possible Target for Production of Salinity-Tolerant Crop Plants. , 2018, , 257-281.		4
52	Plantâ€"Microbe Interaction and Salt Stress Tolerance in Plants. , 2015, , 282-305.		4
53	Genetic Variability and Association Analysis of Soybean (<i>Glycine max</i> (L.) Merrill) for Yield and Yield Attributing Traits. Plant Gene & Trait, 0, , .	0.0	4
54	Phenotypic and Molecular Assessment of Wheat Genotypes Tolerant to Leaf Blight, Rust and Blast Diseases. Phyton, 2021, 90, 1301-1320.	0.7	3

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55	Salinity Tolerance in Canola: Insights from Proteomic Studies. , 0, , .		3
56	Genetic Variability and Traits Association Analysis of Tomato (Lycopersicon esculentum L.) Genotypes for Yield and Quality Attributes. Universal Journal of Plant Science, 2016, 4, 23-34.	0.3	3
57	Variability for agromorphological traits, genetic parameters, correlation and path coefficient analyses in Lentil (Lens culinaris Medik.). Research in Plant Biology, 0, , 1-7.	0.0	3
58	Application of moringa leaf extract improves growth and yield of Tomato (Solanum lycopersicum) and Indian Spinach (Basella alba). Plant Science Today, 0, , .	0.7	3
59	Transgenic Plants Over-expressing Glutathione Biosynthetic Genes and Abiotic Stress Tolerance. , 2017, , 397-412.		2
60	Potential determinants of salinity tolerance in rice (Oryza sativa L.) and modulation of tolerance by exogenous ascorbic acid application. Journal of Phytology, 0, , 86-98.	0.3	2
61	Transgenic Plants for Higher Antioxidant Content and Drought Stress Tolerance. , 2016, , 473-511.		1
62	Morphological variability and genetic diversity of Aman rice germplasm of Bangladesh cultivated in Mymensingh region. Plant Science Today, 2021, 8, .	0.7	1
63	Vertical distribution of soil nutrients under different land use systems in Bangladesh. Journal of Aridland Agriculture, 0, , 6-12.	0.0	1
64	Combining ability and heterosis analyses for oil and healthy fatty acid composition in groundnut (Arachis hypogaea L.). Plant Science Today, 2021, 8, .	0.7	0
65	Morphological Characterization of Deepwater Rice Genotypes. Agriculture and Food Sciences Research, 2016, 3, 59-65.	0.1	0
66	The Effect of Exposure to a Combination of Stressors on Rice Productivity and Grain Yields. , 2020, , 675-727.		0
67	Evaluation of rice (<i>Oryza sativa</i>L.) genotypes grown under combined salinity and submergence stresses based on vegetative stage phenotyping. Acta Biologica Szegediensis, 2022, 2, 145-162.	0.3	0