Kamrun Nahar

List of Publications by Year
in descending order

96 papers	9,924 citations	46918 47 h-index	88477 70 g-index
116 all docs	116 docs citations	116 times ranked	7958 citing authors

#	Article	IF	Citations
1	Physiological, Biochemical, and Molecular Mechanisms of Heat Stress Tolerance in Plants. International Journal of Molecular Sciences, 2013, 14, 9643-9684.	1.8	1,470
2	Regulation of Ascorbate-Glutathione Pathway in Mitigating Oxidative Damage in Plants under Abiotic Stress. Antioxidants, 2019, 8, 384.	2.2	586
3	Glutathione in plants: biosynthesis and physiological role in environmental stress tolerance. Physiology and Molecular Biology of Plants, 2017, 23, 249-268.	1.4	495
4	Potassium: A Vital Regulator of Plant Responses and Tolerance to Abiotic Stresses. Agronomy, 2018, 8, 31.	1.3	408
5	Polyamine and nitric oxide crosstalk: Antagonistic effects on cadmium toxicity in mung bean plants through upregulating the metal detoxification, antioxidant defense and methylglyoxal detoxification systems. Ecotoxicology and Environmental Safety, 2016, 126, 245-255.	2.9	292
6	Potential Use of Halophytes to Remediate Saline Soils. BioMed Research International, 2014, 2014, 1-12.	0.9	257
7	Plant Response to Salt Stress and Role of Exogenous Protectants to Mitigate Salt-Induced Damages. , 2013, , 25-87.		250
8	Exogenous Proline and Glycine Betaine Mediated Upregulation of Antioxidant Defense and Glyoxalase Systems Provides Better Protection against Salt-Induced Oxidative Stress in Two Rice (<i>Oryza) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	0.9	230
9	Importance of nitric oxide in cadmium stress tolerance in crop plants. Plant Physiology and Biochemistry, 2013, 63, 254-261.	2.8	228
10	Exogenous glutathione confers high temperature stress tolerance in mung bean (Vigna radiata L.) by modulating antioxidant defense and methylglyoxal detoxification system. Environmental and Experimental Botany, 2015, 112, 44-54.	2.0	205
11	Regulation of ROS Metabolism in Plants under Environmental Stress: A Review of Recent Experimental Evidence. International Journal of Molecular Sciences, 2020, 21, 8695.	1.8	202
12	Coordinated Actions of Glyoxalase and Antioxidant Defense Systems in Conferring Abiotic Stress Tolerance in Plants. International Journal of Molecular Sciences, 2017, 18, 200.	1.8	199
13	Regulation of Reactive Oxygen Species and Antioxidant Defense in Plants under Salinity. International Journal of Molecular Sciences, 2021, 22, 9326.	1.8	187
14	Nitric oxide-induced saltÂstress tolerance in plants: ROS metabolism, signaling, and molecular interactions. Plant Biotechnology Reports, 2018, 12, 77-92.	0.9	184
15	Calcium Supplementation Improves Na+/K+ Ratio, Antioxidant Defense and Glyoxalase Systems in Salt-Stressed Rice Seedlings. Frontiers in Plant Science, 2016, 7, 609.	1.7	171
16	Insights into citric acid-induced cadmium tolerance and phytoremediation in Brassica juncea L.: Coordinated functions of metal chelation, antioxidant defense and glyoxalase systems. Ecotoxicology and Environmental Safety, 2018, 147, 990-1001.	2.9	161
17	Polyamines Confer Salt Tolerance in Mung Bean (Vigna radiata L.) by Reducing Sodium Uptake, Improving Nutrient Homeostasis, Antioxidant Defense, and Methylglyoxal Detoxification Systems. Frontiers in Plant Science, 2016, 7, 1104.	1.7	155
18	Glutathione-induced drought stress tolerance in mung bean: coordinated roles of the antioxidant defence and methylglyoxal detoxification systems. AoB PLANTS, 2015, 7, plv069.	1.2	149

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19	Exogenous Silicon Attenuates Cadmium-Induced Oxidative Stress in Brassica napus L. by Modulating AsA-GSH Pathway and Glyoxalase System. Frontiers in Plant Science, 2017, 8, 1061.	1.7	147
20	Selenium in plants: Boon or bane?. Environmental and Experimental Botany, 2020, 178, 104170.	2.0	140
21	Silicon-mediated regulation of antioxidant defense and glyoxalase systems confers drought stress tolerance in Brassica napus L.. South African Journal of Botany, 2018, 115, 50-57.	1.2	139
22	Exogenous jasmonic acid modulates the physiology, antioxidant defense and glyoxalase systems in imparting drought stress tolerance in different Brassica species. Plant Biotechnology Reports, 2014, 8, 279-293.	0.9	134
23	Hydrogen Peroxide Pretreatment Mitigates Cadmium-Induced Oxidative Stress in Brassica napus L.: An Intrinsic Study on Antioxidant Defense and Glyoxalase Systems. Frontiers in Plant Science, 2017, 8, 115.	1.7	114
24	Extreme Temperature Responses, Oxidative Stress and Antioxidant Defense in Plants. , 0, , .		112
25	Roles of exogenous glutathione in antioxidant defense system and methylglyoxal detoxification during salt stress in mung bean. Biologia Plantarum, 2015, 59, 745-756.	1.9	112
26	Manganese-induced salt stress tolerance in rice seedlings: regulation of ion homeostasis, antioxidant defense and glyoxalase systems. Physiology and Molecular Biology of Plants, 2016, 22, 291-306.	1.4	112
27	Exogenous glutathione attenuates lead-induced oxidative stress in wheat by improving antioxidant defense and physiological mechanisms. Journal of Plant Interactions, 2018, 13, 203-212.	1.0	109
28	Physiological and biochemical mechanisms of spermine-induced cadmium stress tolerance in mung bean (Vigna radiata L.) seedlings. Environmental Science and Pollution Research, 2016, 23, 21206-21218.	2.7	100
29	Insights into spermine-induced combined high temperature and drought tolerance in mung bean: osmoregulation and roles of antioxidant and glyoxalase system. Protoplasma, 2017, 254, 445-460.	1.0	98
30	Exogenous vanillic acid enhances salt tolerance of tomato: Insight into plant antioxidant defense and glyoxalase systems. Plant Physiology and Biochemistry, 2020, 150, 109-120.	2.8	94
31	Î³-aminobutyric acid (GABA) confers chromium stress tolerance in Brassica juncea L. by modulating the antioxidant defense and glyoxalase systems. Ecotoxicology, 2017, 26, 675-690.	1.1	92
32	Calcium Mitigates Arsenic Toxicity in Rice Seedlings by Reducing Arsenic Uptake and Modulating the Antioxidant Defense and Glyoxalase Systems and Stress Markers. BioMed Research International, 2015, 2015, 1-12.	0.9	84
33	Biostimulants for the Regulation of Reactive Oxygen Species Metabolism in Plants under Abiotic Stress. Cells, 2021, 10, 2537.	1.8	84
34	Exogenous calcium alleviates cadmium-induced oxidative stress in rice (Oryza sativa L.) seedlings by regulating the antioxidant defense and glyoxalase systems. Revista Brasileira De Botanica, 2016, 39, 393-407.	0.5	83
35	Polyamines-induced aluminum tolerance in mung bean: A study on antioxidant defense and methylglyoxal detoxification systems. Ecotoxicology, 2017, 26, 58-73.	1.1	83
36	Oxidative Damage and Antioxidant Defense in Sesamum indicum after Different Waterlogging Durations. Plants, 2019, 8, 196.	1.6	83

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37	Maleic acid assisted improvement of metal chelation and antioxidant metabolism confers chromium tolerance in Brassica juncea L.. Ecotoxicology and Environmental Safety, 2017, 144, 216-226.	2.9	77
38	Silicon-induced antioxidant defense and methylglyoxal detoxification works coordinately in alleviating nickel toxicity in Oryza sativa L.. Ecotoxicology, 2019, 28, 261-276.	1.1	77
39	Exogenous Spermidine Alleviates Low Temperature Injury in Mung Bean (Vigna radiata L.) Seedlings by Modulating Ascorbate-Glutathione and Glyoxalase Pathway. International Journal of Molecular Sciences, 2015, 16, 30117-30132.	1.8	75
40	Modulation of Antioxidant Machinery and the Methylglyoxal Detoxification System in Selenium-Supplemented Brassica napus Seedlings Confers Tolerance to High Temperature Stress. Biological Trace Element Research, 2014, 161, 297-307.	1.9	73
41	Exogenous nitric oxide pretreatment protects Brassica napus L. seedlings from paraquat toxicity through the modulation of antioxidant defense and glyoxalase systems. Plant Physiology and Biochemistry, 2018, 126, 173-186.	2.8	73
42	Interaction of sulfur with phytohormones and signaling molecules in conferring abiotic stress tolerance to plants. Plant Signaling and Behavior, 2018, 13, e1477905.	1.2	71
43	Manganese-induced cadmium stress tolerance in rice seedlings: Coordinated action of antioxidant defense, glyoxalase system and nutrient homeostasis. Comptes Rendus - Biologies, 2016, 339, 462-474.	0.1	69
44	Exogenous nitric oxide donor and arginine provide protection againstÂshort-term drought stress in wheat seedlings. Physiology and Molecular Biology of Plants, 2018, 24, 993-1004.	1.4	69
45	Nitric oxide pretreatment enhances antioxidant defense and glyoxalase systems to confer PEG-induced oxidative stress in rapeseed. Journal of Plant Interactions, 2017, 12, 323-331.	1.0	67
46	Nitric oxide and hydrogen sulfide: two intimate collaborators regulating plant defense against abiotic stress. Plant Growth Regulation, 2020, 90, 409-424.	1.8	67
47	Enhancing Plant Productivity Under Salt Stress: Relevance of Poly-omics. , 2013, , 113-156.		61
48	Exogenous Silicon Protects Brassica napus Plants from Salinity-Induced Oxidative Stress Through the Modulation of AsA-GSH Pathway, Thiol-Dependent Antioxidant Enzymes and Glyoxalase Systems. Gesunde Pflanzen, 2018, 70, 185-194.	1.7	61
49	Polyamine Action under Metal/Metalloid Stress: Regulation of Biosynthesis, Metabolism, and Molecular Interactions. International Journal of Molecular Sciences, 2019, 20, 3215.	1.8	56
50	Selenium Toxicity in Plants and Environment: Biogeochemistry and Remediation Possibilities. Plants, 2020, 9, 1711.	1.6	56
51	Phenological Variation and its Relation with Yield in several Wheat (Triticum aestivum L.) Cultivars under Normal and Late Sowing Mediated Heat Stress Condition. Notulae Scientia Biologicae, 2010, 2, 51-56.	0.1	52
52	Roles of Osmolytes in Plant Adaptation to Drought and Salinity. , 2016, , 37-68.		51
53	Comparative Physiological and Biochemical Changes in Tomato (Solanum lycopersicum L.) Under Salt Stress and Recovery: Role of Antioxidant Defense and Glyoxalase Systems. Antioxidants, 2019, 8, 350.	2.2	49
54	Nitric Oxide Regulates Plant Growth, Physiology, Antioxidant Defense, and Ion Homeostasis to Confer Salt Tolerance in the Mangrove Species, Kandelia obovata. Antioxidants, 2021, 10, 611.	2.2	43

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55	Arsenic-Induced Oxidative Stress and Antioxidant Defense in Plants. Stresses, 2022, 2, 179-209.	1.8	40
56	Mitigation of PEG-induced drought stress in rapeseed (Brassica rapa L.) by exogenous application of osmolytes. Biocatalysis and Agricultural Biotechnology, 2019, 20, 101197.	1.5	36
57	Alleviation of osmotic stress in Brassica napus, B. campestris, and B. juncea by ascorbic acid application. Biologia Plantarum, 2014, 58, 697-708.	1.9	35
58	Plant Responses and Tolerance to High Temperature Stress: Role of Exogenous Phytoprotectants. , 2015, , 385-435.		33
59	Supplemental Selenium and Boron Mitigate Salt-Induced Oxidative Damages in Glycine max L.. Plants, 2021, 10, 2224.	1.6	33
60	Arsenic Toxicity in Plants and Possible Remediation. , 2015, , 433-501.		31
61	Reactive Oxygen Species Metabolism and Antioxidant Defense in Plants Under Metal/Metalloid Stress. , 2019, , 221-257.		29
62	Approaches to Enhance Salt Stress Tolerance in Wheat. , 0, , .		27
63	Selenium Supplementation and Crop Plant Tolerance to Metal/Metalloid Toxicity. Frontiers in Plant Science, 2021, 12, 792770.	1.7	27
64	EDTA reduces cadmium toxicity in mustard (Brassica juncea L.) by enhancing metal chelation, antioxidant defense and glyoxalase systems. Acta Agrobotanica, 2019, 72, .	1.0	23
65	Biochar and Chitosan Regulate Antioxidant Defense and Methylglyoxal Detoxification Systems and Enhance Salt Tolerance in Jute (Corchorus olitorius L.). Antioxidants, 2021, 10, 2017.	2.2	23
66	Use of iso-osmotic solution to understand salt stress responses in lentil (Lens culinaris Medik.). South African Journal of Botany, 2017, 113, 346-354.	1.2	22
67	Emerging Role of Osmolytes in Enhancing Abiotic Stress Tolerance in Rice. , 2019, , 677-708.		22
68	Soybean Production and Environmental Stresses. , 2016, , 61-102.		21
69	Drought Stress Tolerance in Wheat: Omics Approaches in Understanding and Enhancing Antioxidant Defense. , 2018, , 267-307.		21
70	Role of Tocopherol (Vitamin E) in Plants. , 2014, , 267-289.		20
71	Recent Advances in Biotechnology and Genomic Approaches for Abiotic Stress Tolerance in Crop Plants. , 2015, , 333-366.		20
72	Plant growth regulator interactions results enhancement of antioxidant enzymes in<i>Catharanthus roseus</i>. Journal of Plant Interactions, 2010, 5, 135-145.	1.0	19

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73	Silicon and Selenium. , 2014, , 377-422.		19
74	Tebuconazole and trifloxystrobin regulate the physiology, antioxidant defense and methylglyoxal detoxification systems in conferring salt stress tolerance in Triticum aestivum L.. Physiology and Molecular Biology of Plants, 2020, 26, 1139-1154.	1.4	19
75	Exogenous application of gibberellic acid mitigates drought-induced damage in spring wheat. Acta Agrobotanica, 2019, 72, .	1.0	19
76	Salicylic Acid: An All-Rounder in Regulating Abiotic Stress Responses in Plants. , 2017, , .		18
77	Actions of Biological Trace Elements in Plant Abiotic Stress Tolerance. , 2017, , 213-274.		17
78	Regulation of Reactive Oxygen Species Metabolism and Glyoxalase Systems by Exogenous Osmolytes Confers Thermotolerance in Brassica napus. Gesunde Pflanzen, 2020, 72, 3-16.	1.7	17
79	Î²-Aminobutyric Acid Pretreatment Confers Salt Stress Tolerance in Brassica napus L. by Modulating Reactive Oxygen Species Metabolism and Methylglyoxal Detoxification. Plants, 2020, 9, 241.	1.6	17
80	Relative tolerance of different species of Brassica to cadmium toxicity: Coordinated role of antioxidant defense and glyoxalase systems. Plant OMICS, 2017, 10, 107-117.	0.4	17
81	Exogenous salicylic acid and kinetin modulate reactive oxygen species metabolism and glyoxalase system to confer waterlogging stress tolerance in soybean (Glycine max L.). Plant Stress, 2022, 3, 100057.	2.7	17
82	The Role of Sulfur in Plant Abiotic Stress Tolerance: Molecular Interactions and Defense Mechanisms. , 2018, , 221-252.		15
83	Calcium-Mediated Growth Regulation and Abiotic Stress Tolerance in Plants. , 2019, , 291-331.		15
84	Heat stress responses and thermotolerance in soybean. , 2016, , 261-284.		11
85	Responses, Adaptation, and ROS Metabolism in Plants Exposed to Waterlogging Stress. , 2017, , 257-281.		9
86	Insight into the thiourea-induced drought tolerance in two chickpea varieties: Regulation of osmoprotection, reactive oxygen species metabolism and glyoxalase system. Plant Physiology and Biochemistry, 2021, 167, 449-458.	2.8	9
87	Enhancing Salt Tolerance in Soybean by Exogenous Boron: Intrinsic Study of the Ascorbate-Glutathione and Glyoxalase Pathways. Plants, 2021, 10, 2085.	1.6	9
88	Comparative Physiology of Indica and Japonica Rice under Salinity and Drought Stress: An Intrinsic Study on Osmotic Adjustment, Oxidative Stress, Antioxidant Defense and Methylglyoxal Detoxification. Stresses, 2022, 2, 156-178.	1.8	9
89	Zinc Supplementation Enhances Glutathione-Mediated Antioxidant Defense and Glyoxalase Systems to Conferring Salt Tolerance in Soybean (Glycine max L.). Agronomy, 2022, 12, 1032.	1.3	7
90	Sowing Dates and Cultivars Mediated Changes in Phenology and Yield Traits of Cotton-Sunflower Cropping System in the Arid Environment. International Journal of Plant Production, 2021, 15, 291-302.	1.0	6

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91	Plant Phenolic Compounds for Abiotic Stress Tolerance. , 2022, , 193-237.		6
92	Plants Behavior Under Soil Acidity Stress: Insight into Morphophysiological, Biochemical, and Molecular Responses. , 2019, , 35-82.		5
93	Managing Abiotic Stresses With Rice Agriculture to Achieve Sustainable Food Security. , 2019, , 23-45.		5
94	Response and Tolerance of Fabaceae Plants to Metal/Metalloid Toxicity. , 2020, , 435-482.		2
95	Heat Shock-Induced Salt Stress Tolerance in Lentil (Lens culinaris Medik.). Russian Journal of Plant Physiology, 2019, 66, 450-460.	0.5	0
96	Fabaceae Plants Response and Tolerance to High Temperature Stress. , 2020, , 337-371.		0