Naser A Anjum

List of Publications by Year
in descending order

114 papers	7,661 citations	66343 42 h-index	56724 83 g-index
125 all docs	125 docs citations	125 times ranked	8019 citing authors

#	Article	IF	Citations
1	Salicylic acid-induced abiotic stress tolerance and underlying mechanisms in plants. Frontiers in Plant Science, 2015, 6, 462.	3.6	815
2	Glutathione and glutathione reductase: A boon in disguise for plant abiotic stress defense operations. Plant Physiology and Biochemistry, 2013, 70, 204-212.	5.8	404
3	Approaches in modulating proline metabolism in plants for salt and drought stress tolerance: Phytohormones, mineral nutrients and transgenics. Plant Physiology and Biochemistry, 2017, 115, 126-140.	5.8	337
4	Minimising toxicity of cadmium in plantsâ€"role of plant growth regulators. Protoplasma, 2015, 252, 399-413.	2.1	292
5	Piriformospora indica: Potential and Significance in Plant Stress Tolerance. Frontiers in Microbiology, 2016, 7, 332.	3.5	272
6	Lipids and proteinsâ€"major targets of oxidative modifications in abiotic stressed plants. Environmental Science and Pollution Research, 2015, 22, 4099-4121.	5.3	252
7	Catalase and ascorbate peroxidaseâ€"representative H2O2-detoxifying heme enzymes in plants. Environmental Science and Pollution Research, 2016, 23, 19002-19029.	5.3	248
8	Superoxide dismutaseâ€"mentor of abiotic stress tolerance in crop plants. Environmental Science and Pollution Research, 2015, 22, 10375-10394.	5.3	247
9	Jasmonates in plants under abiotic stresses: Crosstalk with other phytohormones matters. Environmental and Experimental Botany, 2018, 145, 104-120.	4.2	192
10	Calcium and Potassium Supplementation Enhanced Growth, Osmolyte Secondary Metabolite Production, and Enzymatic Antioxidant Machinery in Cadmium-Exposed Chickpea (Cicer arietinum L.). Frontiers in Plant Science, 2016, 7, 513.	3.6	190
11	Arbuscular mycorrhizal symbiosis and abiotic stress in plants: A review. Journal of Plant Biology, 2016, 59, 407-426.	2.1	188
12	Sulphur protects mustard (Brassica campestris L.) from cadmium toxicity by improving leaf ascorbate and glutathione. Plant Growth Regulation, 2008, 54, 271-279.	3.4	168
13	Brassinosteroids make plant life easier under abiotic stresses mainly by modulating major components of antioxidant defense system. Frontiers in Environmental Science, 2015, 2, .	3.3	166
14	Understanding the significance of sulfur in improving salinity tolerance in plants. Environmental and Experimental Botany, 2011, 70, 80-87.	4.2	148
15	Jacks of metal/metalloid chelation trade in plantsÃ¢â,¬â€an overview. Frontiers in Plant Science, 2015, 6, 192.	3.6	148
16	ATP-sulfurylase, sulfur-compounds, and plant stress tolerance. Frontiers in Plant Science, 2015, 6, 210.	3.6	145
17	Silver nanoparticles in soilâ€"plant systems. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	144
18	Identification and Comparative Analysis of H2O2-Scavenging Enzymes (Ascorbate Peroxidase and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Science, 2016, 7, 301.	3.6	144

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19	Single-bilayer graphene oxide sheet impacts and underlying potential mechanism assessment in germinating faba bean (Vicia faba L.). Science of the Total Environment, 2014, 472, 834-841.	8.0	137
20	Reactive Oxygen Species Generation-Scavenging and Signaling during Plant-Arbuscular Mycorrhizal and Piriformospora indica Interaction under Stress Condition. Frontiers in Plant Science, 2016, 7, 1574.	3.6	133
21	Nanoscale copper in the soilâ€"plant system â€" toxicity and underlying potential mechanisms. Environmental Research, 2015, 138, 306-325.	7.5	124
22	Metal/metalloid stress tolerance in plants: role of ascorbate, its redox couple, and associated enzymes. Protoplasma, 2014, 251, 1265-1283.	2.1	121
23	Glutathione and proline can coordinately make plants withstand the joint attack of metal(loid) and salinity stresses. Frontiers in Plant Science, 2014, 5, 662.	3.6	111
24	Too much is badâ€"an appraisal of phytotoxicity of elevated plant-beneficial heavy metal ions. Environmental Science and Pollution Research, 2015, 22, 3361-3382.	5.3	108
25	Salicylic acid-mediated changes in photosynthesis, nutrients content and antioxidant metabolism in two mustard (Brassica juncea L.) cultivars differing in salt tolerance. Acta Physiologiae Plantarum, 2011, 33, 877-886.	2.1	107
26	DNA Damage and Repair in Plants under Ultraviolet and Ionizing Radiations. Scientific World Journal, The, 2015, 2015, 1-11.	2.1	102
27	Modulation and significance of nitrogen and sulfur metabolism in cadmium challenged plants. Plant Growth Regulation, 2016, 78, 1-11.	3.4	101
28	Cadmium causes oxidative stress in mung bean by affecting the antioxidant enzyme system and ascorbate-glutathione cycle metabolism. Russian Journal of Plant Physiology, 2011, 58, 92-99.	1.1	95
29	Modulation of glutathione and its related enzymes in plantsâ€™ responses to toxic metals and metalloidsâ€"A review. Environmental and Experimental Botany, 2011, 75, 307-307.	4.2	84
30	Photosynthetic Traits and Activities of Antioxidant Enzymes in Blackgram (Vigna mungo L. Hepper) Under Cadmium Stress. American Journal of Plant Physiology, 2007, 3, 25-32.	0.2	79
31	Growth, photosynthesis and antioxidant metabolism in mustard (Brassica juncea L.) cultivars differing in ATP-sulfurylase activity under salinity stress. Scientia Horticulturae, 2009, 122, 455-460.	3.6	75
32	Genome-wide identification and expression analysis of sulfate transporter (SULTR) genes in potato (Solanum tuberosum L.). Planta, 2016, 244, 1167-1183.	3.2	64
33	Increased activity of ATP-sulfurylase and increased contents of cysteine and glutathione reduce high cadmium-induced oxidative stress in mustard cultivar with high photosynthetic potential. Russian Journal of Plant Physiology, 2009, 56, 670-677.	1.1	61
34	Transport phenomena of nanoparticles in plants and animals/humans. Environmental Research, 2016, 151, 233-243.	7.5	60
35	Single-bilayer graphene oxide sheet tolerance and glutathione redox system significance assessment in faba bean (Vicia faba L.). Journal of Nanoparticle Research, 2013, 15, 1.	1.9	59
36	Assessment of cadmium accumulation, toxicity, and tolerance in Brassicaceae and Fabaceae plantsâ€"implications for phytoremediation. Environmental Science and Pollution Research, 2014, 21, 10286-10293.	5.3	59

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37	Salt Marsh Halophyte Services to Metalâ€“Metalloid Remediation: Assessment of the Processes and Underlying Mechanisms. Critical Reviews in Environmental Science and Technology, 2014, 44, 2038-2106.	12.8	58
38	Some key physiological and molecular processes of cold acclimation. Biologia Plantarum, 2016, 60, 603-618.	1.9	57
39	An Insight into the Role of Salicylic Acid and Jasmonic Acid in Salt Stress Tolerance. , 2012, , 277-300.		54
40	Improving Growth and Productivity of Oleiferous Brassicas under Changing Environment: Significance of Nitrogen and Sulphur Nutrition, and Underlying Mechanisms. Scientific World Journal, The, 2012, 2012, 1-12.	2.1	53
41	Ontogenic variation in response of<i>Brassica campestris</i>L. to cadmium toxicity. Journal of Plant Interactions, 2008, 3, 189-198.	2.1	50
42	Mechanisms and Role of Nitric Oxide in Phytotoxicity-Mitigation of Copper. Frontiers in Plant Science, 2020, 11, 675.	3.6	48
43	Mechanistic Elucidation of Salicylic Acid and Sulphur-Induced Defence Systems, Nitrogen Metabolism, Photosynthetic, and Growth Potential of Mungbean (Vigna radiata) Under Salt Stress. Journal of Plant Growth Regulation, 2021, 40, 1000-1016.	5.1	47
44	Impact of Seasonal Fluctuations on the Sediment-Mercury, its Accumulation and Partitioning in Halimione portulacoides and Juncus maritimus Collected from Ria de Aveiro Coastal Lagoon (Portugal). Water, Air, and Soil Pollution, 2011, 222, 1-15.	2.4	41
45	Nitric Oxide Pre-Treatment Advances Seed Germination and Alleviates Copper-Induced Photosynthetic Inhibition in Indian Mustard. Plants, 2020, 9, 776.	3.5	41
46	The outcomes of the functional interplay of nitric oxide and hydrogen sulfide in metal stress tolerance in plants. Plant Physiology and Biochemistry, 2020, 155, 523-534.	5.8	40
47	Effect of Timing of Sulfur Fertilizer Application on Growth and Yield of Rapeseed. Journal of Plant Nutrition, 2005, 28, 1049-1059.	1.9	39
48	The key roles of salicylic acid and sulfur in plant salinity stress tolerance. Journal of Plant Growth Regulation, 2022, 41, 1891-1904.	5.1	38
49	Responses of Components of Antioxidant System in Moongbean Genotypes to Cadmium Stress. Communications in Soil Science and Plant Analysis, 2008, 39, 2469-2483.	1.4	37
50	Biophysical and Biochemical Markers of Metal/Metalloid-Impacts in Salt Marsh Halophytes and Their Implications. Frontiers in Environmental Science, 2016, 4, .	3.3	37
51	Genome-wide analysis and transcriptional expression pattern-assessment of superoxide dismutase (SOD) in rice and Arabidopsis under abiotic stresses. Plant Gene, 2019, 17, 100165.	2.3	34
52	Role of sulphate transporter systems in sulphur efficiency of mustard genotypes. Plant Science, 2005, 169, 842-846.	3.6	33
53	Ascorbate and Glutathione: Protectors of Plants in Oxidative Stress. , 2010, , 209-229.		28
54	Salt marsh macrophyte Phragmites australis strategies assessment for its dominance in mercury-contaminated coastal lagoon (Ria de Aveiro, Portugal). Environmental Science and Pollution Research, 2012, 19, 2879-2888.	5.3	25

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55	Eriophorum angustifolium and Lolium perenne metabolic adaptations to metals- and metalloids-induced anomalies in the vicinity of a chemical industrial complex. Environmental Science and Pollution Research, 2013, 20, 568-581.	5.3	25
56	Ethylene and Polyamines in Counteracting Heavy Metal Phytotoxicity: A Crosstalk Perspective. Journal of Plant Growth Regulation, 2018, 37, 1050-1065.	5.1	25
57	Sulfur-mediated control of salinity impact on photosynthesis and growth in mungbean cultivars screened for salt tolerance involves glutathione and proline metabolism, and glucose sensitivity. Acta Physiologiae Plantarum, 2019, 41, 1.	2.1	22
58	Coordinated Role of Nitric Oxide, Ethylene, Nitrogen, and Sulfur in Plant Salt Stress Tolerance. Stresses, 2021, 1, 181-199.	4.8	22
59	Cadmium effects on carbonic anhydrase, photosynthesis, dry mass and antioxidative enzymes in wheat (<i>Triticum aestivum</i>) under low and sufficient zinc. Journal of Plant Interactions, 2008, 3, 31-37.	2.1	21
60	Mercury contaminated systems under recovery can represent an increased risk to seafood human consumers â€" A paradox depicted in bivalvesâ€™ body burdens. Food Chemistry, 2012, 133, 665-670.	8.2	21
61	Potassium-induced alleviation of salinity stress in Brassica campestris L.. Open Life Sciences, 2011, 6, 1054-1063.	1.4	20
62	Control of cucumber (Cucumis sativus L.) tolerance to chilling stressÃ¢â,¬â€evaluating the role of ascorbic acid and glutathione. Frontiers in Environmental Science, 0, 2, .	3.3	20
63	Editorial: Redox Homeostasis Managers in Plants under Environmental Stresses. Frontiers in Environmental Science, 2016, 4, .	3.3	20
64	Hydrogen peroxide potentiates defense system in presence of sulfur to protect chloroplast damage and photosynthesis of wheat under drought stress. Physiologia Plantarum, 2021, 172, 922-934.	5.2	20
65	Control of Elevated Ion Accumulation, Oxidative Stress, and Lipid Peroxidation with Salicylic Acid-Induced Accumulation of Glycine Betaine in Salinity-Exposed Vigna radiata L. Applied Biochemistry and Biotechnology, 2021, 193, 3301-3320.	2.9	20
66	Arbuscular mycorrhizae: natural modulators of plantâ€"nutrient relation and growth in stressful environments. Archives of Microbiology, 2022, 204, 264.	2.2	20
67	Targeting the Redox Regulatory Mechanisms for Abiotic Stress Tolerance in Crops. , 2018, , 151-220.		19
68	Halimione portulacoides (L.) physiological/biochemical characterization for its adaptive responses to environmental mercury exposure. Environmental Research, 2014, 131, 39-49.	7.5	18
69	Growth characteristics and antioxidant metabolism of moongbean genotypes differing in photosynthetic capacity subjected to water deficit stress. Journal of Plant Interactions, 2008, 3, 127-136.	2.1	16
70	Reactive oxygen species detection-approaches in plants: Insights into genetically encoded FRET-based sensors. Journal of Biotechnology, 2020, 308, 108-117.	3.8	16
71	Soil Sulfur Sources Differentially Enhance Cadmium Tolerance in Indian Mustard (Brassica juncea L.). Soil Systems, 2021, 5, 29.	2.6	16
72	Ethylene-nitrogen synergism induces tolerance to copper stress by modulating antioxidant system and nitrogen metabolism and improves photosynthetic capacity in mustard. Environmental Science and Pollution Research, 2022, 29, 49029-49049.	5.3	16

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73	Real-time monitoring of glutathione in living cells using genetically encoded FRET-based ratiometric nanosensor. Scientific Reports, 2020, 10, 992.	3.3	15
74	Arsenic toxicity in garden cress (Lepidium sativum Linn.): significance of potassium nutrition. Environmental Science and Pollution Research, 2013, 20, 6039-6049.	5.3	14
75	Plant-beneficial elements status assessment in soil-plant system in the vicinity of a chemical industry complex: shedding light on forage grass safety issues. Environmental Science and Pollution Research, 2015, 22, 2239-2246.	5.3	14
76	Genome-wide identification and expression profiling of EIL gene family in woody plant representative poplar (Populus trichocarpa). Archives of Biochemistry and Biophysics, 2017, 627, 30-45.	3.0	13
77	Mercury-Induced Chromosomal Damage in Wild Fish (Dicentrarchus labrax L.) Reflecting Aquatic Contamination in Contrasting Seasons. Archives of Environmental Contamination and Toxicology, 2012, 63, 554-562.	4.1	12
78	Brain glutathione redox system significance for the control of silica-coated magnetite nanoparticles with or without mercury co-exposures mediated oxidative stress in European eel (Anguilla anguilla) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	5.3	12
79	Enhancing Cleanup of Environmental Pollutants. , 2017, , .		12
80	Effects of temperature and water limitation on the germination of Stipagrostis ciliata seeds collected from Sidi Bouzid Governorate in Central Tunisia. Journal of Arid Land, 2018, 10, 304-315.	2.3	11
81	ATP-sulfurylase activity, photosynthesis, and shoot dry mass of mustard (Brassica juncea L.) cultivars differing in sulfur accumulation capacity. Photosynthetica, 2008, 46, .	1.7	10
82	Oxidative stress status, antioxidant metabolism and polypeptide patterns in Juncus maritimus shoots exhibiting differential mercury burdens in Ria de Aveiro coastal lagoon (Portugal). Environmental Science and Pollution Research, 2014, 21, 6652-6661.	5.3	10
83	Juncus maritimus root biochemical assessment for its mercury stabilization potential in Ria de Aveiro coastal lagoon (Portugal). Environmental Science and Pollution Research, 2015, 22, 2231-2238.	5.3	10
84	Abscisic Acid in Coordination with Nitrogen Alleviates Salinity-Inhibited Photosynthetic Potential in Mustard by Improving Proline Accumulation and Antioxidant Activity. Stresses, 2021, 1, 162-180.	4.8	10
85	Editorial: Recent Insights Into the Double Role of Hydrogen Peroxide in Plants. Frontiers in Plant Science, 2022, 13, 843274.	3.6	10
86	Managing the pools of cellular redox buffers and the control of oxidative stress during the ontogeny of drought-exposed mungbean (Vigna radiata L.)Ã¢â,¬â€role of sulfur nutrition. Frontiers in Environmental Science, 2015, 2, .	3.3	9
87	Evaluation of zinc accumulation, allocation, and tolerance in Zea mays L. seedlings: implication for zinc phytoextraction. Environmental Science and Pollution Research, 2015, 22, 15443-15448.	5.3	9
88	Involvement of Ethylene in Reversal of Salt Stress by Salicylic Acid in the Presence of Sulfur in Mustard (Brassica juncea L.). Journal of Plant Growth Regulation, 2022, 41, 3449-3466.	5.1	9
89	Phenological development stages variation versus mercury tolerance, accumulation, and allocation in salt marsh macrophytes Triglochin maritima and Scirpus maritimus prevalent in Ria de Aveiro coastal lagoon (Portugal). Environmental Science and Pollution Research, 2013, 20, 3910-3922.	5.3	8
90	Biocompatibility and biotoxicity of in-situ synthesized carboxylated nanodiamond-cobalt oxide nanocomposite. Journal of Materials Science and Technology, 2017, 33, 879-888.	10.7	8

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91	Sulfur Availability Potentiates Phytohormones-Mediated Action in Plants. , 2019, , 287-301.		8
92	Plant acclimation to environmental stress: a critical appraisal. Frontiers in Plant Science, 2015, 6, .	3.6	7
93	Metal Hyperaccumulation and Tolerance in Alyssum, Arabidopsis and Thlaspi: An Overview. Environmental Pollution, 2012, , 99-137.	0.4	7
94	Protection of growth and photosynthesis of Brassica juncea genotype with dual type sulfur transport system against sulfur deprivation by coordinate changes in the activities of sulfur metabolism enzymes and cysteine and glutathione production. Russian Journal of Plant Physiology, 2011, 58, 892-898.	1.1	6
95	Achieving Crop Stress Tolerance and Improvementâ€"an Overview of Genomic Techniques. Applied Biochemistry and Biotechnology, 2015, 177, 1395-1408.	2.9	6
96	Assessment of Antioxidants in Selected Plant Rootstocks. Antioxidants, 2020, 9, 209.	5.1	6
97	Appraisal of functional significance of sulfur assimilatory products in plants under elevated metal accumulation. Crop and Pasture Science, 2022, 73, 573-584.	1.5	5
98	Activity of 1-aminocyclopropane carboxylic acid synthase and growth of mustard (Brassica juncea) following defoliation. Plant Growth Regulation, 2008, 56, 151-157.	3.4	4
99	Mechanism of Cadmium Toxicity and Tolerance in Crop Plants. , 2013, , 361-385.		4
100	Lipid peroxidation and its control in Anguilla anguilla hepatocytes under silica-coated iron oxide nanoparticles (with or without mercury) exposure. Environmental Science and Pollution Research, 2015, 22, 9617-9625.	5.3	4
101	Abiotic Stress Tolerance and Sustainable Agriculture: A Functional Genomics Perspective. , 2015, , 439-472.		4
102	Are Early Somatic Embryos of the Norway Spruce (Picea abies (L.) Karst.) Organised?. PLoS ONE, 2015, 10, e0144093.	2.5	3
103	Role of Phytochelatins in Redox Caused Stress in Plants and Animals. , 0, , .		3
104	Phagocytic cell responses to silica-coated dithiocarbamate-functionalized iron oxide nanoparticles and mercury co-exposures in Anguilla anguilla L.. Environmental Science and Pollution Research, 2016, 23, 12272-12286.	5.3	3
105	Nitrogen Sources Mitigate Cadmium Phytotoxicity Differentially by Modulating Cellular Buffers, N-assimilation, Non-protein Thiols, and Phytochelatins in Mustard (Brassica juncea L.). Journal of Soil Science and Plant Nutrition, 2022, 22, 3847-3867.	3.4	3
106	Carbon and nitrogen assimilation, and growth of moongbean (<i>Vigna radiata</i> [L.] Wilczek) cultivars grown under sulfur regimes. Archives of Agronomy and Soil Science, 2009, 55, 207-215.	2.6	2
107	Evaluation of cotton burdock (Arctium tomentosum Mill.) responses to multi-metal exposure. Environmental Science and Pollution Research, 2017, 24, 5431-5438.	5.3	2
108	Oxidative Stress Biomarkers and Antioxidant Defense in Plants Exposed to Metallic Nanoparticles. , 2019, , 427-439.		2

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109	Ageing-induced changes in nutritional and anti-nutritional factors in cowpea (Vigna unguiculata L.). Journal of Food Science and Technology, 2019, 56, 1757-1765.	2.8	2
110	Constructed and Floating Wetlands for Sustainable Water Reclamation. Sustainability, 2022, 14, 1268.	3.2	2
111	Editorial: The Brassicaceaeâ€"Agri-Horticultural and Environmental Perspectives. Frontiers in Plant Science, 2018, 9, 1141.	3.6	1
112	Pollutants Transformation and Metabolite Accumulation in Soils. , 2018, , 89-102.		1
113	Plant traits and phenotypic variability effect on the phytomass production ofStipagrostis ciliata (Desf.) De Winter. Saudi Journal of Biological Sciences, 2020, 27, 1553-1561.	3.8	1
114	Non-biological Approaches for Enhancing the Cleanup of Environmental Pollutants: An Introduction. , 2017, , 1-4.		0