Melatonin and calcium function synergistically to prom metabolism under arsenic-induced stress

Journal of Hazardous Materials

398, 122882

DOI: 10.1016/j.jhazmat.2020.122882

Citation Report

#	Article	IF	Citations
1	Silicon-induced postponement of leaf senescence is accompanied by modulation of antioxidative defense and ion homeostasis in mustard (Brassica juncea) seedlings exposed to salinity and drought stress. Plant Physiology and Biochemistry, 2020, 157, 47-59.	2.8	70
2	Crosstalk of hydrogen sulfide and nitric oxide requires calcium to mitigate impaired photosynthesis under cadmium stress by activating defense mechanisms in Vigna radiata. Plant Physiology and Biochemistry, 2020, 156, 278-290.	2.8	84
3	Jasmonic acid: a key frontier in conferring abiotic stress tolerance in plants. Plant Cell Reports, 2021, 40, 1513-1541.	2.8	120
4	Exogenous nitric oxide requires endogenous hydrogen sulfide to induce the resilience through sulfur assimilation in tomato seedlings under hexavalent chromium toxicity. Plant Physiology and Biochemistry, 2020, 155, 20-34.	2.8	66
5	Foliar Application of 24-Epibrassinolide Improves Growth, Ascorbate-Glutathione Cycle, and Glyoxalase System in Brown Mustard (Brassica juncea (L.) Czern.) under Cadmium Toxicity. Plants, 2020, 9, 1487.	1.6	29
6	Phytomelatonin: An overview of the importance and mediating functions of melatonin against environmental stresses. Physiologia Plantarum, 2021, 172, 820-846.	2.6	75
7	Melatonin-mediated regulation of anthocyanin biosynthesis and antioxidant defense confer tolerance to arsenic stress in Camellia sinensis L. Journal of Hazardous Materials, 2021, 403, 123922.	6.5	103
8	Auxin metabolic network regulates the plant response to metalloids stress. Journal of Hazardous Materials, 2021, 405, 124250.	6.5	47
9	Main nitric oxide (NO) hallmarks to relieve arsenic stress in higher plants. Journal of Hazardous Materials, 2021, 406, 124289.	6.5	68
10	Calcium-hydrogen sulfide crosstalk during K+-deficient NaCl stress operates through regulation of Na+/H+ antiport and antioxidative defense system in mung bean roots. Plant Physiology and Biochemistry, 2021, 159, 211-225.	2.8	52
11	Melatonin application differentially modulates the enzymes associated with antioxidative machinery and ascorbateâ€glutathione cycle during arsenate exposure in indica rice varieties. Plant Biology, 2021, 23, 193-201.	1.8	22
12	Reactive oxygen species-evoked genotoxic stress mediates arsenic-induced suppression of male germ cell proliferation and decline in sperm quality. Journal of Hazardous Materials, 2021, 406, 124768.	6.5	25
13	Mitigation of arsenate toxicity by indole-3-acetic acid in brinjal roots: Plausible association with endogenous hydrogen peroxide. Journal of Hazardous Materials, 2021, 405, 124336.	6.5	31
14	Increasing Lignification in Translucent Disorder Aril of Mangosteen Related to the ROS Defensive Function. Journal of Food Quality, 2021, 2021, 1-10.	1.4	3
15	Melatonin protects against environmental stress-induced fetal growth restriction via suppressing ROS-mediated GCN2/ATF4/BNIP3-dependent mitophagy in placental trophoblasts. Redox Biology, 2021, 40, 101854.	3.9	47
16	Identification of Compounds with Potential Therapeutic Uses from Sweet Pepper (Capsicum annuum L.) Fruits and Their Modulation by Nitric Oxide (NO). International Journal of Molecular Sciences, 2021, 22, 4476.	1.8	18
17	An Integrated Method for Tracking and Monitoring Stomata Dynamics from Microscope Videos. Plant Phenomics, 2021, 2021, 9835961.	2.5	11
18	Melatonin Mitigates Nickel Toxicity by Improving Nutrient Uptake Fluxes, Root Architecture System, Photosynthesis, and Antioxidant Potential in Tomato Seedling. Journal of Soil Science and Plant Nutrition, 2021, 21, 1842-1855.	1.7	58

#	Article	IF	Citations
19	ROS and NO Phytomelatonin-Induced Signaling Mechanisms under Metal Toxicity in Plants: A Review. Antioxidants, 2021, 10, 775.	2.2	26
20	Exogenous Potassium (K+) Positively Regulates Na+/H+ Antiport System, Carbohydrate Metabolism, and Ascorbateâ€“Glutathione Cycle in H2S-Dependent Manner in NaCl-Stressed Tomato Seedling Roots. Plants, 2021, 10, 948.	1.6	20
21	Metallothionein Attenuated Arsenic-Induced Cytotoxicity: The Underlying Mechanism Reflected by Metabolomics and Lipidomics. Journal of Agricultural and Food Chemistry, 2021, 69, 5372-5380.	2.4	18
22	Ascorbate and glutathione independently alleviate arsenate toxicity in brinjal but both require endogenous nitric oxide. Physiologia Plantarum, 2021, 173, 276-286.	2.6	7
23	Melatonin as a plant biostimulant in crops and during postâ€harvest: a new approach is needed. Journal of the Science of Food and Agriculture, 2021, 101, 5297-5304.	1.7	39
24	Î±-Ketoglutarate Enhanced Solanum melongenaÂL. Growth: Acceleration of Nitrogen Assimilating Enzymes and Antioxidant System Under Arsenate Toxicity. Journal of Plant Growth Regulation, 2022, 41, 1699-1713.	2.8	2
25	Heat stress-mediated effects on the morphophysiological, biochemical, and ultrastructural parameters of germinating Melanoxylon brauna Schott. seeds. Plant Cell Reports, 2021, 40, 1773-1787.	2.8	4
26	Melatonin Improves Cotton Salt Tolerance by Regulating ROS Scavenging System and Ca2 + Signal Transduction. Frontiers in Plant Science, 2021, 12, 693690.	1.7	44
27	Integrated usage of Trichoderma harzianum and biochar to ameliorate salt stress on spinach plants. Archives of Agronomy and Soil Science, 2022, 68, 2005-2026.	1.3	48
28	Enhancement of Nicotiana tabacum Resistance Against Dehydration-Induced Leaf Senescence via Metabolite/Phytohormone-Gene Regulatory Networks Modulated by Melatonin. Frontiers in Plant Science, 2021, 12, 686062.	1.7	8
29	Exogenous Melatonin Improves the Growth of Rice Seedlings by Regulating Redox Balance and Ion Homeostasis Under Salt Stress. Journal of Plant Growth Regulation, 2022, 41, 2108-2121.	2.8	25
30	Influence of Water Stress on Growth, Chlorophyll Contents and Solute Accumulation in Three Accessions of Vicia faba L. from Tunisian Arid Region. , 0, , .		2
31	Variations in root morphological indices of rice (Oryza sativa L.) induced by seedling establishment methods and their relation to arsenic accumulation in plant tissues. Environmental Pollution, 2021, 281, 116999.	3.7	8
32	Nitric Oxide Functions as a Downstream Signal for Melatonin-Induced Cold Tolerance in Cucumber Seedlings. Frontiers in Plant Science, 2021, 12, 686545.	1.7	37
33	Rhizosphere mediated growth enhancement using phosphate solubilizing rhizobacteria and their tri-calcium phosphate solubilization activity under pot culture assays in Rice (Oryza sativa.). Saudi Journal of Biological Sciences, 2021, 28, 3692-3700.	1.8	9
34	Politics of the natural vegetation to balance the hazardous level of elements in marble polluted ecosystem through phytoremediation and physiological responses. Journal of Hazardous Materials, 2021, 414, 125451.	6.5	28
35	Exogenous Ca2+ Associated with Melatonin Alleviates Drought-Induced Damage in the Woody Tree Dalbergia odorifera. Journal of Plant Growth Regulation, 2022, 41, 2359-2374.	2.8	8
36	Exogenous melatoninâ€mediated regulation of K⁺/Na⁺ transport, H⁺â€ATPase activity and enzymatic antioxidative defence operate through endogenous hydrogen sulphide signalling in NaClâ€stressed tomato seedling roots. Plant Biology, 2021, 23, 797-805.	1.8	35

#	Article	IF	Citations
37	Role of Melatonin in Inducing the Physiological and Biochemical Processes Associated with Heat Stress Tolerance in Tall Fescue (Festuca arundinaceous). Journal of Plant Growth Regulation, 2022, 41, 2759-2768.	2.8	9
38	Comparison of As accumulation and speciation in water spinach (Ipomoea aquatica Forssk.) grown in As-elevated soils under flooding versus upland conditions. Journal of Hazardous Materials, 2021, 415, 125711.	6.5	8
39	Melatonin regulates antioxidant strategy in response to continuous salt stress in rice seedlings. Plant Physiology and Biochemistry, 2021, 165, 239-250.	2.8	38
40	Usage of Si, P, Se, and Ca Decrease Arsenic Concentration/Toxicity in Rice, a Review. Applied Sciences (Switzerland), 2021, 11, 8090.	1.3	11
41	Melatonin and Carbohydrate Metabolism in Plant Cells. Plants, 2021, 10, 1917.	1.6	35
42	Lead contamination affects the primary productivity traits, biosynthesis of macromolecules and distribution of metal in durum wheat (Triticumdurum L.). Saudi Journal of Biological Sciences, 2021, 28, 4946-4956.	1.8	3
43	Divergence of reactions to arsenic (As) toxicity in tobacco (Nicotiana benthamiana) plants: A lesson from peroxidase involvement. Journal of Hazardous Materials, 2021, 417, 126049.	6.5	12
44	Effects of seed priming treatments on the germination and development of two rapeseed (Brassica) Tj ETQq1 1 0.784314 rgBT /Overlo e0257236.	1.1	35
45	The ZrO2 NPs enhanced the risk of arsenate by promoting its accumulation and reducing its detoxification during food chain transfer from Daphnia magna to zebrafish. Journal of Hazardous Materials, 2022, 424, 127338.	6.5	4
46	Selenium nanoparticles ameliorate Brassica napus L. cadmium toxicity by inhibiting the respiratory burst and scavenging reactive oxygen species. Journal of Hazardous Materials, 2021, 417, 125900.	6.5	70
47	Biochar mitigates arsenic-induced human health risks and phytotoxicity in quinoa under saline conditions by modulating ionic and oxidative stress responses. Environmental Pollution, 2021, 287, 117348.	3.7	29
48	Arsenic behavior in soil-plant system and its detoxification mechanisms in plants: A review. Environmental Pollution, 2021, 286, 117389.	3.7	66
49	Abscisic acid priming regulates arsenite toxicity in two contrasting rice (Oryza sativa L.) genotypes through differential functioning of sub1A quantitative trait loci. Environmental Pollution, 2021, 287, 117586.	3.7	15
50	Nitric oxide could allay arsenic phytotoxicity in tomato (Solanum lycopersicum L.) by modulating photosynthetic pigments, phytochelatin metabolism, molecular redox status and arsenic sequestration. Plant Physiology and Biochemistry, 2021, 167, 337-348.	2.8	48
51	Green magnesium oxide nanoparticles-based modulation of cellular oxidative repair mechanisms to reduce arsenic uptake and translocation in rice (Oryza sativa L.) plants. Environmental Pollution, 2021, 288, 117785.	3.7	52
52	A comprehensive review of adaptations in plants under arsenic toxicity: Physiological, metabolic and molecular interventions. Environmental Pollution, 2021, 290, 118029.	3.7	28
53	Arsenic transport and interaction with plant metabolism: Clues for improving agricultural productivity and food safety. Environmental Pollution, 2021, 290, 117987.	3.7	54
54	Molybdenum and hydrogen sulfide synergistically mitigate arsenic toxicity by modulating defense system, nitrogen and cysteine assimilation in faba bean (Vicia faba L.) seedlings. Environmental Pollution, 2021, 290, 117953.	3.7	43

#	Article	IF	Citations
55	Exogenous melatonin alleviates NO2 damage in tobacco leaves by promoting antioxidant defense, modulating redox homeostasis, and signal transduction. Journal of Hazardous Materials, 2022, 424, 127265.	6.5	18
56	Tryptophan: A Precursor of Signaling Molecules in Higher Plants. Plant in Challenging Environments, 2021, , 273-289.	0.4	4
57	Effect of exogenous calcium on physiological characteristics of salt tolerance in Tartary buckwheat. Biologia (Poland), 2021, 76, 3621-3630.	0.8	5
58	Response of Hybrid Tomato (Solanum lycopersiucm L) for Calcium Nutrition: Growth, Root Traits and SPAD Index. International Journal of Plant & Soil Science, 0, , 117-123.	0.2	0
59	Modulation of Cellular Redox Status and Antioxidant Defense System after Synergistic Application of Zinc Oxide Nanoparticles and Salicylic Acid in Rice (Oryza sativa) Plant under Arsenic Stress. Plants, 2021, 10, 2254.	1.6	53
60	Defense interplay of the zinc-oxide nanoparticles and melatonin in alleviating the arsenic stress in soybean (Glycine max L.). Chemosphere, 2022, 288, 132471.	4.2	45
61	Role of exogenously applied putrescine in amelioration of cadmium stress in Coriandrum sativum by modulating antioxidant system. International Journal of Phytoremediation, 2022, 24, 955-962.	1.7	16
62	Molybdenum-induced endogenous nitric oxide (NO) signaling coordinately enhances resilience through chlorophyll metabolism, osmolyte accumulation and antioxidant system in arsenate stressed-wheat (Triticum aestivum L.) seedlings. Environmental Pollution, 2022, 292, 118268.	3.7	28
63	Mitigation effects of exogenous melatonin-selenium nanoparticles on arsenic-induced stress in Brassica napus. Environmental Pollution, 2022, 292, 118473.	3.7	48
64	Effect of sulfate application on inhibition of arsenic bioaccumulation in rice (Oryza sativa L.) with consequent health risk assessment of cooked rice arsenic on human: A pot to plate study. Environmental Pollution, 2022, 293, 118561.	3.7	16
65	Antioxidants as modulators of arsenic-induced oxidative stress tolerance in plants: An overview. Journal of Hazardous Materials, 2022, 427, 127891.	6.5	53
66	Melatonin alleviates photoinhibition in cucumber seedlings by modulating partitioning of absorbed excitation energy in photosystem â…¡. Biologia Plantarum, 0, 65, 307-315.	1.9	0
67	Potassium and melatonin-mediated regulation of fructose-1,6-bisphosphatase (FBPase) and sedoheptulose-1,7- bisphosphatase (SBPase) activity improve photosynthetic efficiency, carbon assimilation and modulate glyoxalase system accompanying tolerance to cadmium stress in tomato seedlings. Plant Physiology and Biochemistry, 2022, 171, 49-65.	2.8	27
68	Selenium Supplementation and Crop Plant Tolerance to Metal/Metalloid Toxicity. Frontiers in Plant Science, 2021, 12, 792770.	1.7	27
69	The combined supplementation of melatonin and salicylic acid effectively detoxifies arsenic toxicity by modulating phytochelatins and nitrogen metabolism in pepper plants. Environmental Pollution, 2022, 297, 118727.	3.7	50
70	Melatonin Enhances Drought Tolerance by Regulating Leaf Stomatal Behavior, Carbon and Nitrogen Metabolism, and Related Gene Expression in Maize Plants. Frontiers in Plant Science, 2021, 12, 779382.	1.7	20
71	Application of melatonin and PGPR alleviates thiamethoxam induced toxicity by regulating the TCA cycle in Brassica juncea L. Saudi Journal of Biological Sciences, 2022, 29, 1348-1354.	1.8	4
72	Phytomelatonin: an unexpected molecule with amazing performances in plants. Journal of Experimental Botany, 2022, 73, 5779-5800.	2.4	62

#	Article	IF	Citations
73	Melatonin improves the photosynthesis in. Functional Plant Biology, 2021, 49, 89-101.	1.1	13
74	Commentary for an article on photooxidation in isolated chloroplasts. Archives of Biochemistry and Biophysics, 2022, , 109133.	1.4	3
75	Exogenous Melatonin Promotes the Salt Tolerance by Removing Active Oxygen and Maintaining Ion Balance in Wheat (Triticum aestivum L.). Frontiers in Plant Science, 2021, 12, 787062.	1.7	24
76	Nitric Oxide Alleviates Photochemical Damage Induced by Cadmium Stress in Pea Seedlings. Phyton, 2022, 91, 959-973.	0.4	4
77	Harnessing plant microbiome for mitigating arsenic toxicity in sustainable agriculture. Environmental Pollution, 2022, 300, 118940.	3.7	18
78	Spermine-mediated polyamine metabolism enhances arsenic-stress tolerance in Phaseolus vulgaris by expression of zinc-finger proteins related genes and modulation of mineral nutrient homeostasis and antioxidative system. Environmental Pollution, 2022, 300, 118941.	3.7	26
79	Integrated assessment of phytotoxicity, stress responses, and bioaccumulative mechanisms of the arsenic-contaminated agricultural runoff using a soilless cultivation system. Chemical Engineering Research and Design, 2022, 159, 266-280.	2.7	3
80	Hydrogen sulfide: an emerging component against abiotic stress in plants. Plant Biology, 2022, 24, 540-558.	1.8	46
81	Comparative Morphology and Biochemical Analysis of Nickel Toxicity in Minor Fruit Species (Grewia) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.4	2
82	Molecular insight into arsenic uptake, transport, phytotoxicity, and defense responses in plants: a critical review. Planta, 2022, 255, 87.	1.6	20
83	Interactions of melatonin, reactive oxygen species, and nitric oxide during fruit ripening: an update and prospective view. Journal of Experimental Botany, 2022, 73, 5947-5960.	2.4	34
84	Calcium Oxide Nanoparticles Have the Role of Alleviating Arsenic Toxicity of Barley. Frontiers in Plant Science, 2022, 13, 843795.	1.7	27
85	Coumarin-Mediated Growth Regulations, Antioxidant Enzyme Activities, and Photosynthetic Efficiency of Sorghum bicolor Under Saline Conditions. Frontiers in Plant Science, 2022, 13, 799404.	1.7	8
86	Arsenic-Induced Oxidative Stress and Antioxidant Defense in Plants. Stresses, 2022, 2, 179-209.	1.8	40
87	Differential response of two endophytic bacterial strains inoculation on biochemical and physiological parameters of Bacopa monnieri L. under arsenic stress conditions. Journal of Hazardous Materials Advances, 2022, 6, 100055.	1.2	2
88	Exogenously-applied L-glutamic acid protects photosynthetic functions and enhances arsenic tolerance through increased nitrogen assimilation and antioxidant capacity in rice (Oryza sativa L.). Environmental Pollution, 2022, 301, 119008.	3.7	20
89	Role of melatonin in promoting plant growth by regulating carbon assimilation and ATP accumulation. Plant Science, 2022, 319, 111276.	1.7	18
90	Soil Nutrient and Rice (Oryza sativa L.) Growth Characteristics under Different Arsenic Contamination Levels. Han'guk T'oyang Piryo Hakhoe Chi Han'guk T'oyang Piryo Hakhoe, 2021, 54, 601-609.	0.1	1

#	Article	IF	Citations
91	Functions of Melatonin during Postharvest of Horticultural Crops. Plant and Cell Physiology, 2023, 63, 1764-1786.	1.5	51
92	Anabolism and signaling pathways of phytomelatonin. Journal of Experimental Botany, 2022, 73, 5801-5817.	2.4	11
93	Introducing melatonin to the horticultural industry: physiological roles, potential applications, and challenges. Horticulture Research, 2022, 9, .	2.9	25
94	Arsenic as hazardous pollutant: Perspectives on engineering remediation tools. Science of the Total Environment, 2022, 838, 155870.	3.9	17
95	Iron oxide nanoparticles and selenium supplementation improve growth and photosynthesis by modulating antioxidant system and gene expression of chlorophyll synthase (CHLG) and protochlorophyllide oxidoreductase (POR) in arsenic-stressed Cucumis melo. Environmental Pollution, 2022, 307, 119413.	3.7	27
96	Sulfur dioxide improves drought tolerance through activating Ca2+ signaling pathways in wheat seedlings. Ecotoxicology, 2022, 31, 852-859.	1.1	1
97	Thiourea mediated ROS-metabolites reprogramming restores root system architecture under arsenic stress in rice. Journal of Hazardous Materials, 2022, 435, 129020.	6.5	14
98	Selenium alleviates physiological traits, nutrient uptake and nitrogen metabolism in rice under arsenate stress. Environmental Science and Pollution Research, 2022, 29, 70862-70881.	2.7	16
99	Calcium homeostasis and potential roles in combatting environmental stresses in plants. South African Journal of Botany, 2022, 148, 683-693.	1.2	31
100	Functions and prospects of melatonin in plant growth, yield, and quality. Journal of Experimental Botany, 2022, 73, 5928-5946.	2.4	45
101	Silicon Enhances Morphoâ€“Physioâ€“Biochemical Responses in Arsenic Stressed Spinach (Spinacia) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.8	21
102	Recent advances in arsenic mitigation in rice through biotechnological approaches. International Journal of Phytoremediation, 2023, 25, 305-313.	1.7	2
103	New insights into the role of melatonin in photosynthesis. Journal of Experimental Botany, 2022, 73, 5918-5927.	2.4	20
104	Foliar application of biosynthetic nano-selenium alleviates the toxicity of Cd, Pb, and Hg in Brassica chinensis by inhibiting heavy metal adsorption and improving antioxidant system in plant. Ecotoxicology and Environmental Safety, 2022, 240, 113681.	2.9	32
105	Alleviation of cadmium toxicity in Zea mays L. through up-regulation of growth, antioxidant defense system and organic osmolytes under calcium supplementation. PLoS ONE, 2022, 17, e0269162.	1.1	5
106	Melatonin enhanced oilseed rape growth and mitigated Cd stress risk: A novel trial for reducing Cd accumulation by bioenergy crops. Environmental Pollution, 2022, 308, 119642.	3.7	14
107	A silicon particle-based courier promotes melatonin-mediated seed tolerance to nickel toxicity in rice. Environmental Science: Nano, 2022, 9, 2854-2868.	2.2	6
108	Perspective of Melatonin-Mediated Stress Resilience and Cu Remediation Efficiency of Brassica juncea in Cu-Contaminated Soils. Frontiers in Plant Science, 0, 13, .	1.7	6

#	Article	IF	Citations
109	Calcium induced growth, physio-biochemical, antioxidant, osmolyte adjustments and phytoconstituent status in spinach under heat stress. South African Journal of Botany, 2022, 149, 701-711.	1.2	9
110	Field experiments for evaluating the effects of water management and phosphate application on inorganic arsenic accumulation in water spinach (Ipomoea aquatica Forssk.). Science of the Total Environment, 2022, 844, 157232.	3.9	2
111	Calcium and jasmonic acid exhibit synergistic effects in mitigating arsenic stress in tomato seedlings accompanied by antioxidative defense, increased nutrient accumulation and upregulation of glyoxalase system. South African Journal of Botany, 2022, 150, 14-25.	1.2	10
112	Melatonin Influences Stomatal Behavior, Root Morphology, Cell Viability, Photosynthetic Responses, Fruit Yield, and Fruit Quality of Tomato Plants Exposed to Salt Stress. Journal of Plant Growth Regulation, 2023, 42, 2408-2432.	2.8	18
113	Exogenous melatonin strongly affects dynamic photosynthesis and enhances water-water cycle in tobacco. Frontiers in Plant Science, 0, 13, .	1.7	1
114	Melatonin confers fenugreek tolerance to salinity stress by stimulating the biosynthesis processes of enzymatic, non-enzymatic antioxidants, and diosgenin content. Frontiers in Plant Science, 0, 13, .	1.7	8
115	Melatonin-Mediated Alleviation of Soil Salinity Stress by Modulation of Redox Reactions and Phytochemical Status in Guar (Cyamopsis tetragonoloba L.). Journal of Plant Growth Regulation, 2023, 42, 4851-4869.	2.8	4
116	Effects of ascorbic acid addition on the oxidative stress response of Oryza sativa L. plants to As(V) exposure. Plant Physiology and Biochemistry, 2022, 186, 232-241.	2.8	6
117	Involvement of NO and Ca2+ in the enhancement of cold tolerance induced by melatonin in winter turnip rape (Brassica rapa L.). Plant Physiology and Biochemistry, 2022, 190, 262-276.	2.8	2
118	Arsenic in Karstic Paddy Soil with High Geochemical Background in Guangxi, China: Its Bioavailability and Controlling Factors. SSRN Electronic Journal, 0, , .	0.4	0
119	Sugar Metabolism and Photosynthesis of Tomatoes Irrigated with Water Treated with Low-Frequency Electromagnetic Resonance Fields in Different Fertigation Doses. Horticulturae, 2022, 8, 868.	1.2	1
120	Mechanism of calcium in melatonin enhancement of functional substance-phenolic acid in germinated hulless barley. RSC Advances, 2022, 12, 29214-29222.	1.7	6
121	Silicon-nanoparticles doped biochar is more effective than biochar for mitigation of arsenic and salinity stress in Quinoa: Insight to human health risk assessment. Frontiers in Plant Science, 0, 13, .	1.7	9
122	Melatonin-mediated resistance to copper oxide nanoparticles-induced toxicity by regulating the photosynthetic apparatus, cellular damages and antioxidant defense system in maize seedlings. Environmental Pollution, 2023, 316, 120639.	3.7	8
123	Water deficit aggravated the inhibition of photosynthetic performance of maize under mercury stress but is alleviated by brassinosteroids. Journal of Hazardous Materials, 2023, 443, 130365.	6.5	12
124	Sodium nitroprusside ameliorates lead toxicity in rice (Oryza sativa L.) by modulating the antioxidant scavenging system, nitrogen metabolism, lead sequestration mechanism, and proline metabolism. Environmental Science and Pollution Research, 2023, 30, 24408-24423.	2.7	2
125	Fulvic acid mitigates cadmium toxicity-induced damage in cucumber seedlings through the coordinated interaction of antioxidant enzymes, organic acid, and amino acid. Environmental Science and Pollution Research, 2023, 30, 28780-28790.	2.7	4
126	Melatonin alleviates arsenite toxicity by decreasing the arsenic accumulation in cell protoplasts and increasing the antioxidant capacity in rice. Chemosphere, 2023, 312, 137292.	4.2	13

#	Article	IF	Citations
127	Melatonin alleviates arsenic (As) toxicity in rice plants via modulating antioxidant defense system and secondary metabolites and reducing oxidative stress. Environmental Pollution, 2023, 318, 120868.	3.7	20
128	Melatonin-Induced Detoxification of Organic Pollutants and Alleviation of Phytotoxicity in Selected Horticultural Crops. Horticulturae, 2022, 8, 1142.	1.2	14
129	Oligomeric Proanthocyanidins Confer Cold Tolerance in Rice through Maintaining Energy Homeostasis. Antioxidants, 2023, 12, 79.	2.2	1
130	Nitric oxide affects melatonin mediates enrichment of isoflavones and physiological biochemistry in germinated soybeans under Ultraviolet-B stress. Plant Growth Regulation, 0, , .	1.8	0
131	Ascorbic and Salicylic Acids Vitalized Growth, Biochemical Responses, Antioxidant Enzymes, Photosynthetic Efficiency, and Ionic Regulation to Alleviate Salinity Stress in Sorghum bicolor. Journal of Plant Growth Regulation, 2023, 42, 5266-5279.	2.8	3
132	Melatonin: Current status and future perspectives in horticultural plants. Frontiers in Plant Science, 0, 14, .	1.7	2
133	Exogenous melatonin alleviates cadmium-induced inhibition of growth and photosynthesis through upregulating antioxidant defense system in strawberry. South African Journal of Botany, 2023, 157, 10-18.	1.2	28
134	Calcium and L-glutamate present the opposite role in managing arsenic in barley. Environmental Pollution, 2023, 321, 121141.	3.7	2
135	Exogenous melatonin enhances tomato heat resistance by regulating photosynthetic electron flux and maintaining ROS homeostasis. Plant Physiology and Biochemistry, 2023, 196, 197-209.	2.8	7
136	Melatonin involves hydrogen sulfide in the regulation of H+-ATPase activity, nitrogen metabolism, and ascorbate-glutathione system under chromium toxicity. Environmental Pollution, 2023, 323, 121173.	3.7	13
137	Melatonin Alleviates Chromium Toxicity in Maize by Modulation of Cell Wall Polysaccharides Biosynthesis, Glutathione Metabolism, and Antioxidant Capacity. International Journal of Molecular Sciences, 2023, 24, 3816.	1.8	12
138	Melatonin mitigates cold-induced damage to pepper seedlings by promoting redox homeostasis and regulating antioxidant profiling. Horticultural Plant Journal, 2024, 10, 532-544.	2.3	5
139	Effect of Thallium(I) on Growth, Nutrient Absorption, Photosynthetic Pigments, and Antioxidant Response of Dittrichia Plants. Antioxidants, 2023, 12, 678.	2.2	6
140	Antioxidants: an approach for restricting oxidative stress induced neurodegeneration in Alzheimerâ€™s disease. Inflammopharmacology, 2023, 31, 717-730.	1.9	8
141	Functions of NO and H2S Signal Molecules Against Plant Abiotic Stress. Methods in Molecular Biology, 2023, , 97-109.	0.4	5
142	Synergistic effects of calcium and melatonin on physiological and phytochemical attributes of Dracocephalum kotschyi genotypes under salinity stress. Physiologia Plantarum, 2023, 175, .	2.6	2
143	Anthocyanin synthesis is critical for melatonin-induced chromium stress tolerance in tomato. Journal of Hazardous Materials, 2023, 453, 131456.	6.5	21
146	Biochemical role of gasotransmitters on plant growth, development, biomass, and tolerance under As stress. , 2023, , 167-185.		0

#	Article	IF	Citations
153	Deciphering the melatonin-mediated response andÂsignalling inÂtheÂregulation ofÂheavy metal stress in plants. Planta, 2023, 257, .	1.6	16
163	Unraveling the importance of melatonin in the alleviation of metal-induced toxicity. , 2023, , 295-319.		0
166	Melatonin and the Metabolism of Reactive Oxygen Species (ROS) in Higher Plants. Plant in Challenging Environments, 2023, , 3-25.	0.4	0
167	Functions and Prospects of Melatonin During Pre-fertilization Reproductive Stages in Plants. Plant in Challenging Environments, 2023, , 123-139.	0.4	0
168	Potential, Mechanism and Molecular Insight of Melatonin in Phyto-Remediation. Plant in Challenging Environments, 2023, , 363-386.	0.4	0
172	Exogenous application of biostimulants for As stress tolerance in crop plants. , 2023, , 243-266.		0