Xiao-Zhang Yu

List of Publications by Year
in descending order

72 papers	1,241 citations	361413 20 h-index	454955 30 g-index
72 all docs	72 docs citations	72 times ranked	880 citing authors

#	Article	IF	Citations
1	Hexavalent chromium induced stress and metabolic responses in hybrid willows. Ecotoxicology, 2007, 16, 299-309.	2.4	67
2	Activities of nitrate reductase and glutamine synthetase in rice seedlings during cyanide metabolism. Journal of Hazardous Materials, 2012, 225-226, 190-194.	12.4	58
3	Uptake, metabolism, and toxicity of methyl tert-butyl ether (MTBE) in weeping willows. Journal of Hazardous Materials, 2006, 137, 1417-1423.	12.4	54
4	Accumulation and Distribution of Trivalent Chromium and Effects on Hybrid Willow (Salix matsudana) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.1	50
5	Metallothioneins enhance chromium detoxification through scavenging ROS and stimulating metal chelation in Oryza sativa. Chemosphere, 2019, 220, 300-313.	8.2	48
6	Differences in uptake and translocation of hexavalent and trivalent chromium by two species of willows. Ecotoxicology, 2008, 17, 747-755.	2.4	47
7	Unraveling genes promoting ROS metabolism in subcellular organelles of Oryza sativa in response to trivalent and hexavalent chromium. Science of the Total Environment, 2020, 744, 140951.	8.0	45
8	The role of exogenous proline in amelioration of lipid peroxidation in rice seedlings exposed to Cr(VI). International Biodeterioration and Biodegradation, 2017, 123, 106-112.	3.9	39
9	Regulation Network of Sucrose Metabolism in Response to Trivalent and Hexavalent Chromium in <i>Oryza sativa</i>. Journal of Agricultural and Food Chemistry, 2019, 67, 9738-9748.	5.2	36
10	The role of EDTA in phytoextraction of hexavalent and trivalent chromium by two willow trees. Ecotoxicology, 2008, 17, 143-152.	2.4	35
11	Metabolic responses of weeping willows to selenate and selenite. Environmental Science and Pollution Research, 2007, 14, 510-517.	5.3	33
12	Effects of exogenous thiocyanate on mineral nutrients, antioxidative responses and free amino acids in rice seedlings. Ecotoxicology, 2013, 22, 752-760.	2.4	30
13	Kinetics of phyto-accumulation of hexavalent and trivalent chromium in rice seedlings. International Biodeterioration and Biodegradation, 2018, 128, 72-77.	3.9	29
14	Effect of Temperature on the Uptake and Metabolism of Cyanide by Weeping Willows. International Journal of Phytoremediation, 2007, 9, 243-255.	3.1	27
15	Effect of temperature on phytoextraction of hexavalent and trivalent chromium by hybrid willows. Ecotoxicology, 2010, 19, 61-68.	2.4	27
16	Inhibition of the mitochondrial respiratory components (Complex I and Complex III) as stimuli to induce oxidative damage in Oryza sativa L. under thiocyanate exposure. Chemosphere, 2020, 243, 125472.	8.2	26
17	Biotransformation and metabolic response of cyanide in weeping willows. Journal of Hazardous Materials, 2007, 147, 838-844.	12.4	25
18	Phytotoxicity of dimethyl sulfoxide (DMSO) to rice seedlings. International Journal of Environmental Science and Technology, 2016, 13, 607-614.	3.5	23

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19	On the role of Î²-cyanoalanine synthase (CAS) in metabolism of free cyanide and ferri-cyanide by rice seedlings. Ecotoxicology, 2012, 21, 548-556.	2.4	21
20	The potential for phytoremediation of iron cyanide complex by willows. Ecotoxicology, 2006, 15, 461-467.	2.4	20
21	Comparative effects of sodium hydrosulfide and proline on functional repair in rice chloroplast through the D1 protein and thioredoxin system under simulated thiocyanate pollution. Chemosphere, 2021, 284, 131389.	8.2	19
22	Chelator-induced phytoextraction of zinc and copper by rice seedlings. Ecotoxicology, 2014, 23, 749-756.	2.4	17
23	Uptake, assimilation and toxicity of cyanogenic compounds in plants: facts and fiction. International Journal of Environmental Science and Technology, 2015, 12, 763-774.	3.5	17
24	Differential expression of the PAL gene family in rice seedlings exposed to chromium by microarray analysis. Ecotoxicology, 2018, 27, 325-335.	2.4	17
25	Molecular evidences on transport of thiocyanate into rice seedlings and assimilation by 13C and 15N labelling and gene expression analyses. International Biodeterioration and Biodegradation, 2019, 139, 11-17.	3.9	17
26	Alternation of antioxidative enzyme gene expression in rice seedlings exposed to methylene blue. Environmental Science and Pollution Research, 2014, 21, 14014-14022.	5.3	16
27	Parameter determination involved in phytotoxicity and transport of cadmium in rice seedlings. International Biodeterioration and Biodegradation, 2014, 96, 121-126.	3.9	16
28	Phytotoxicity of Thiocyanate to Rice Seedlings. Bulletin of Environmental Contamination and Toxicology, 2012, 88, 703-706.	2.7	14
29	Indigenous Proline is a Two-Dimensional Safety-Relief Valve in Balancing Specific Amino Acids in Rice under Hexavalent Chromium Stress. Journal of Agricultural and Food Chemistry, 2021, 69, 11185-11195.	5.2	14
30	Differences in Michaelisâ€"Menten kinetics for different cultivars of maize during cyanide removal. Ecotoxicology and Environmental Safety, 2007, 67, 254-259.	6.0	13
31	Assimilation and physiological effects of ferrocyanide on weeping willows. Ecotoxicology and Environmental Safety, 2008, 71, 609-615.	6.0	13
32	Uptake, accumulation and metabolic response of ferricyanide in weeping willows. Journal of Environmental Monitoring, 2009, 11, 145-152.	2.1	13
33	Analysis of gene expression profiles for metal tolerance protein in rice seedlings exposed to both the toxic hexavalent chromium and trivalent chromium. International Biodeterioration and Biodegradation, 2018, 129, 102-108.	3.9	13
34	Role of cytochrome c in modulating chromium-induced oxidative stress in Oryza sativa. Environmental Science and Pollution Research, 2018, 25, 27639-27649.	5.3	12
35	Quantification of effective concentrations of 1,2-dimethyl phthalate (DMP) to rice seedlings. International Journal of Environmental Science and Technology, 2015, 12, 3009-3016.	3.5	11
36	Phytotoxicity and Transport of Gallium (Ga) in Rice Seedlings for 2-Day of Exposure. Bulletin of Environmental Contamination and Toxicology, 2015, 95, 122-125.	2.7	11

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37	mRNA Analysis of Genes Encoded with Phytochelatin Synthase (PCS) in Rice Seedlings Exposed to Chromium: The Role of Phytochelatins in Cr Detoxification. Bulletin of Environmental Contamination and Toxicology, 2018, 101, 257-261.	2.7	11
38	Assimilation of exogenous cyanide cross talk in Oryza sativa L. to the key nodes in nitrogen metabolism. Ecotoxicology, 2020, 29, 1552-1564.	2.4	11
39	Genetic variation and gene expression of anthocyanin synthesis and transport related enzymes in Oryza sativa against thiocyanate. Plant Physiology and Biochemistry, 2021, 160, 18-26.	5.8	11
40	A modelling study of a buffer zone in abating heavy metal contamination from a gold mine of Hainan Province in nearby agricultural area. Journal of Environmental Management, 2021, 287, 112299.	7.8	11
41	The importance of utilizing nitrate (NO3â˘) over ammonium (NH4+) as nitrogen source during detoxification of exogenous thiocyanate (SCN-) in Oryza sativa. Environmental Science and Pollution Research, 2022, 29, 5622-5633.	5.3	11
42	Effect of temperature on removal of iron cyanides from solution by maize plants. Environmental Science and Pollution Research, 2010, 17, 106-114.	5.3	10
43	Chemometric analysis of N,N-dimethyl formamide-induced phytotoxicity in rice seedlings. International Biodeterioration and Biodegradation, 2017, 125, 54-61.	3.9	10
44	Transcriptomic analysis of cytochrome P450 genes and pathways involved in chromium toxicity in Oryza sativa. Ecotoxicology, 2020, 29, 503-513.	2.4	10
45	Estimating the synergistic and antagonistic effects of dual antibiotics on plants through root elongation test. Ecotoxicology, 2021, 30, 1598-1609.	2.4	10
46	Mathematical quantification of interactive complexity of transcription factors involved in proline-mediated regulative strategies in Oryza sativa under chromium stress. Plant Physiology and Biochemistry, 2022, 182, 36-44.	5.8	10
47	Identification and expression analysis of CYS-A1, CYS-C1, NIT4 genes in rice seedlings exposed to cyanide. Ecotoxicology, 2017, 26, 956-965.	2.4	9
48	Involvement of glutamate receptors in regulating calcium influx in rice seedlings under Cr exposure. Ecotoxicology, 2019, 28, 650-657.	2.4	9
49	Fuzzy synthetic evaluation of the impact of plant growth regulators on the root phenotype traits of rice seedlings under thiocyanate stress. Plant Physiology and Biochemistry, 2021, 158, 182-189.	5.8	9
50	Involvement of Î²-cyanoalanine synthase (Î²-CAS) and sulfurtransferase (ST) in cyanide (CNâ˘) assimilation in rice seedlings. Chemosphere, 2022, 294, 133789.	8.2	9
51	A possible new mechanism involved in ferro-cyanide metabolism by plants. Environmental Science and Pollution Research, 2011, 18, 1343-1350.	5.3	8
52	Kinetics for adsorptive removal of chromium(VI) from aqueous solutions by ferri hydroxide/oxohydroxides. Ecotoxicology, 2014, 23, 734-741.	2.4	8
53	Chromium-induced depression of 15N content and nitrate reductase activity in rice seedlings. International Journal of Environmental Science and Technology, 2017, 14, 29-36.	3.5	8
54	Transcriptome analysis of Oryza sativa in responses to different concentrations of thiocyanate. Environmental Science and Pollution Research, 2019, 26, 11696-11709.	5.3	8

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55	Effects of nitrogen fertilization on removal kinetics of thiocyanate (SCNâˆ’) in rice seedlings. International Journal of Environmental Science and Technology, 2020, 17, 4291-4298.	3.5	8
56	Effects of available nitrogen on the uptake and assimilation of ferrocyanide and ferricyanide complexes in weeping willows. Journal of Hazardous Materials, 2008, 156, 300-307.	12.4	7
57	Evidence of iron cyanides as supplementary nitrogen source to rice seedlings. Ecotoxicology, 2012, 21, 1642-1650.	2.4	7
58	Cr-induced disturbance on expression of six COX genes in rice seedlings. International Journal of Environmental Science and Technology, 2019, 16, 2385-2394.	3.5	7
59	Jasmonic acid and hydrogen sulfide modulate transcriptional and enzymatic changes of plasma membrane NADPH oxidases (NOXs) and decrease oxidative damage in Oryza sativa L. during thiocyanate exposure. Ecotoxicology, 2021, 30, 1511-1520.	2.4	7
60	Responses of free amino acids in rice seedlings during cyanide metabolism. Environmental Science and Pollution Research, 2014, 21, 1411-1417.	5.3	6
61	Elucidating comportment of the glutamate and ornithine pathway on proline accumulation in rice under different nitrogenous nutrition. International Journal of Environmental Science and Technology, 2022, 19, 2993-3000.	3.5	6
62	Integration of RT-qPCR analysis and grey situation decision-making model for evaluating the effects of plant growth regulators on the gene expression in rice seedlings under thiocyanate exposure. Science of the Total Environment, 2021, 783, 146805.	8.0	6
63	Availability of Ferrocyanide and Ferricyanide Complexes as a Nitrogen Source to Cyanogenic Plants. Archives of Environmental Contamination and Toxicology, 2008, 55, 229-237.	4.1	5
64	DNA-protein cross-links involved in growth inhibition of rice seedlings exposed to Ga. Environmental Science and Pollution Research, 2015, 22, 10830-10838.	5.3	5
65	Determination of the Michaelisâ€“Menten kinetics and the genes expression involved in phyto-degradation of cyanide and ferri-cyanide. Ecotoxicology, 2016, 25, 888-899.	2.4	5
66	Tracing the pollution and human risks of potentially toxic elements in agricultural area nearby the cyanide baths from an active private gold mine in Hainan Province, China. Environmental Geochemistry and Health, 2022, 44, 3279-3296.	3.4	5
67	Assessment of ammonium fertilization as a stimulus for proline accumulation in Oryza sativa L. during cyanide assimilation. International Journal of Environmental Science and Technology, 2020, 17, 2811-2818.	3.5	5
68	Transport and Assimilation of Ferricyanide by Three Willow Species. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	4
69	Effects of trivalent chromium on biomass growth, water use efficiency and distribution of nutrient ele-ments in rice seedlings. Applied Environmental Biotechnology, 2016, 1, 64.	2.4	4
70	Microarray-based expression analysis of phytohormone-related genes in rice seedlings during cyanide metabolism. Environmental Science and Pollution Research, 2018, 25, 19701-19712.	5.3	3
71	Interaction of cyanate uptake by rice seedlings with nitrate assimilation: gene expression analysis. Environmental Science and Pollution Research, 2019, 26, 20208-20218.	5.3	3
72	Implications of the fate of hydrogen sulfide derived from assimilation of thiocyanate in rice plants. Chemosphere, 2022, 306, 135500.	8.2	2