Hanumanth Kumar Gurijala

List of Publications by Year
in descending order

92 papers	5,964 citations	71102 41 h-index	76900 74 g-index
92 all docs	92 docs citations	92 times ranked	4889 citing authors

#	Article	IF	Citations
1	Current status of agricultural soil pollution by heavy metals in China: A meta-analysis. Science of the Total Environment, 2019, 651, 3034-3042.	8.0	368
2	Heavy metal pollution and health risk assessment of agricultural soils in a typical peri-urban area in southeast China. Journal of Environmental Management, 2018, 207, 159-168.	7.8	363
3	Potential mechanisms of cadmium removal from aqueous solution by Canna indica derived biochar. Science of the Total Environment, 2016, 562, 517-525.	8.0	361
4	An explanation of soil amendments to reduce cadmium phytoavailability and transfer to food chain. Science of the Total Environment, 2019, 660, 80-96.	8.0	254
5	An integrated approach to assess heavy metal source apportionment in peri-urban agricultural soils. Journal of Hazardous Materials, 2015, 299, 540-549.	12.4	223
6	Capacity and mechanisms of ammonium and cadmium sorption on different wetland-plant derived biochars. Science of the Total Environment, 2016, 539, 566-575.	8.0	208
7	Foliage application of selenium and silicon nanoparticles alleviates Cd and Pb toxicity in rice (Oryza) Tj ETQq1 1 0.784314 rgBT /Overlo	8.0	182
8	Cellular Sequestration of Cadmium in the Hyperaccumulator Plant Species Sedum alfredii Â Â Â. Plant Physiology, 2011, 157, 1914-1925.	4.8	172
9	Comparative efficacy of organic and inorganic amendments for cadmium and lead immobilization in contaminated soil under rice-wheat cropping system. Chemosphere, 2019, 214, 259-268.	8.2	171
10	Removal of phosphate from aqueous solution using magnesium-alginate/chitosan modified biochar microspheres derived from Thalia dealbata. Bioresource Technology, 2016, 218, 1123-1132.	9.6	168
11	A modified receptor model for source apportionment of heavy metal pollution in soil. Journal of Hazardous Materials, 2018, 354, 161-169.	12.4	161
12	Zinc compartmentation in root, transport into xylem, and absorption into leaf cells in the hyperaccumulating species of Sedum alfredii Hance. Planta, 2006, 224, 185-195.	3.2	125
13	Efficiency of lime, biochar, Fe containing biochar and composite amendments for Cd and Pb immobilization in a co-contaminated alluvial soil. Environmental Pollution, 2020, 257, 113609.	7.5	118
14	Complexation with dissolved organic matter and mobility control of heavy metals in the rhizosphere of hyperaccumulator Sedum alfredii. Environmental Pollution, 2013, 182, 248-255.	7.5	110
15	Organic soil additives for the remediation of cadmium contaminated soils and their impact on the soil-plant system: A review. Science of the Total Environment, 2020, 707, 136121.	8.0	108
16	Improvement of cadmium uptake and accumulation in Sedum alfredii by endophytic bacteria Sphingomonas SaMR12: Effects on plant growth and root exudates. Chemosphere, 2014, 117, 367-373.	8.2	106
17	The Effects of the Endophytic Bacterium Pseudomonas fluorescens Sasm05 and IAA on the Plant Growth and Cadmium Uptake of Sedum alfredii Hance. Frontiers in Microbiology, 2017, 8, 2538.	3.5	95
18	Endophytic bacterium Sphingomonas SaMR12 promotes cadmium accumulation by increasing glutathione biosynthesis in Sedum alfredii Hance. Chemosphere, 2016, 154, 358-366.	8.2	91

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19	Anthropogenic mercury emissions from 1980 to 2012 in China. Environmental Pollution, 2017, 226, 230-239.	7.5	87
20	Immobilization of cadmium and lead in contaminated paddy field using inorganic and organic additives. Scientific Reports, 2018, 8, 17839.	3.3	82
21	Effects of pH and low molecular weight organic acids on competitive adsorption and desorption of cadmium and lead in paddy soils. Environmental Monitoring and Assessment, 2012, 184, 6325-6335.	2.7	79
22	Pyrolysis of wetland biomass waste: Potential for carbon sequestration and water remediation. Journal of Environmental Management, 2016, 173, 95-104.	7.8	76
23	Distribution, availability and translocation of heavy metals in soil-oilseed rape (Brassica napus L.) system related to soil properties. Environmental Pollution, 2019, 252, 733-741.	7.5	76
24	COLONIZATION AND MODULATION OF HOST GROWTH AND METAL UPTAKE BY ENDOPHYTIC BACTERIA OFSEDUM ALFREDII. International Journal of Phytoremediation, 2013, 15, 51-64.	3.1	74
25	A review on the thermal treatment of heavy metal hyperaccumulator: Fates of heavy metals and generation of products. Journal of Hazardous Materials, 2021, 405, 123832.	12.4	74
26	Cultivar-specific response of bacterial community to cadmium contamination in the rhizosphere of rice (Oryza sativa L.). Environmental Pollution, 2018, 241, 63-73.	7.5	67
27	The plant-growth promoting bacteria promote cadmium uptake by inducing a hormonal crosstalk and lateral root formation in a hyperaccumulator plant Sedum alfredii. Journal of Hazardous Materials, 2020, 395, 122661.	12.4	67
28	Inoculation of plant growth promoting bacteria from hyperaccumulator facilitated non-host root development and provided promising agents for elevated phytoremediation efficiency. Chemosphere, 2019, 234, 769-776.	8.2	64
29	Responses of soil bacterial community and Cd phytoextraction to a Sedum alfredii-oilseed rape (Brassica napus L. and Brassica juncea L.) intercropping system. Science of the Total Environment, 2020, 723, 138152.	8.0	61
30	Cadmium Exposure-Sedum alfredii Planting Interactions Shape the Bacterial Community in the Hyperaccumulator Plant Rhizosphere. Applied and Environmental Microbiology, 2018, 84, .	3.1	60
31	Hydrothermal carbonization of different wetland biomass wastes: Phosphorus reclamation and hydrochar production. Waste Management, 2020, 102, 106-113.	7.4	57
32	Phytoremediation of Cd-contaminated farmland soil via various Sedum alfredii-oilseed rape cropping systems: Efficiency comparison and cost-benefit analysis. Journal of Hazardous Materials, 2021, 419, 126489.	12.4	53
33	Oxalate secretion from the root apex of Sedum alfredii contributes to hyperaccumulation of Cd. Plant and Soil, 2016, 398, 139-152.	3.7	52
34	Structural and functional variability in root-associated bacterial microbiomes of Cd/Zn hyperaccumulator Sedum alfredii. Applied Microbiology and Biotechnology, 2017, 101, 7961-7976.	3.6	52
35	Eisenia fetida and biochar synergistically alleviate the heavy metals content during valorization of biosolids via enhancing vermicompost quality. Science of the Total Environment, 2019, 684, 597-609.	8.0	52
36	Effects of straw return with N fertilizer reduction on crop yield, plant diseases and pests and potential heavy metal risk in a Chinese rice paddy: A field study of 2 consecutive wheat-rice cycles. Environmental Pollution, 2021, 288, 117741.	7.5	51

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37	Elevated CO2 improves root growth and cadmium accumulation in the hyperaccumulator Sedum alfredii. Plant and Soil, 2012, 354, 325-334.	3.7	50
38	Fava bean intercropping with Sedum alfredii inoculated with endophytes enhances phytoremediation of cadmium and lead co-contaminated field. Environmental Pollution, 2020, 265, 114861.	7.5	49
39	Physiological and metabolomics responses of two wheat (Triticum aestivum L.) genotypes differing in grain cadmium accumulation. Science of the Total Environment, 2021, 769, 145345.	8.0	48
40	Simultaneous sorption and catalytic oxidation of trivalent antimony by Canna indica derived biochars. Environmental Pollution, 2017, 229, 394-402.	7.5	46
41	Genotypic differences in cadmium and nitrate co-accumulation among the Chinese cabbage genotypes under field conditions. Scientia Horticulturae, 2016, 201, 92-100.	3.6	44
42	Spatial imaging and speciation of Cu in rice (Oryza sativa L.) roots using synchrotron-based X-ray microfluorescence and X-ray absorption spectroscopy. Chemosphere, 2017, 175, 356-364.	8.2	44
43	Field crops (Ipomoea aquatica Forsk. and Brassica chinensis L.) for phytoremediation of cadmium and nitrate co-contaminated soils via rotation with Sedum alfredii Hance. Environmental Science and Pollution Research, 2017, 24, 19293-19305.	5.3	44
44	Pseudomonas fluorescens promote photosynthesis, carbon fixation and cadmium phytoremediation of hyperaccumulator Sedum alfredii. Science of the Total Environment, 2020, 726, 138554.	8.0	43
45	Biochar from constructed wetland biomass waste: A review of its potential and challenges. Chemosphere, 2022, 287, 132259.	8.2	42
46	An endophytic bacterium Acinetobacter calcoaceticus Sasm3-enhanced phytoremediation of nitrateâ€“cadmium compound polluted soil by intercropping Sedum alfredii with oilseed rape. Environmental Science and Pollution Research, 2015, 22, 17625-17635.	5.3	40
47	Transformation of Phosphorus in Wetland Biomass during Pyrolysis and Hydrothermal Treatment. ACS Sustainable Chemistry and Engineering, 2019, 7, 16520-16528.	6.7	40
48	Identification of high cadmium-accumulating oilseed sunflower (Helianthus annuus) cultivars for phytoremediation of an Oxisol and an Inceptisol. Ecotoxicology and Environmental Safety, 2020, 187, 109857.	6.0	40
49	Characterization of fava bean (Vicia faba L.) genotypes for phytoremediation of cadmium and lead co-contaminated soils coupled with agro-production. Ecotoxicology and Environmental Safety, 2019, 171, 190-198.	6.0	39
50	New insight into the impact of biochar during vermi-stabilization of divergent biowastes: Literature synthesis and research pursuits. Chemosphere, 2020, 238, 124679.	8.2	38
51	The effects of endophytic bacterium SaMR12 on Sedum alfredii Hance metal ion uptake and the expression of three transporter family genes after cadmium exposure. Environmental Science and Pollution Research, 2017, 24, 9350-9360.	5.3	37
52	Impact Assessment of Cadmium Toxicity and Its Bioavailability in Human Cell Lines (Caco-2 and HL-7702). BioMed Research International, 2014, 2014, 1-8.	1.9	36
53	Sepiolite clay: A review of its applications to immobilize toxic metals in contaminated soils and its implications in soilâ€“plant system. Environmental Technology and Innovation, 2021, 23, 101598.	6.1	36
54	Endophytic bacterium Buttiauxella sp. SaSR13 improves plant growth and cadmium accumulation of hyperaccumulator Sedum alfredii. Environmental Science and Pollution Research, 2018, 25, 21844-21854.	5.3	31

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55	Role of sulfur assimilation pathway in cadmium hyperaccumulation by Sedum alfredii Hance. Ecotoxicology and Environmental Safety, 2014, 100, 159-165.	6.0	30
56	Immobilization and sorption of Cd and Pb in contaminated stagnic anthrosols as amended with biochar and manure combined with inorganic additives. Journal of Environmental Management, 2020, 257, 109999.	7.8	30
57	Identification of wheat (Triticum aestivum L.) genotypes for food safety on two different cadmium contaminated soils. Environmental Science and Pollution Research, 2020, 27, 7943-7956.	5.3	29
58	Foliar application of zinc and selenium alleviates cadmium and lead toxicity of water spinach â€“ Bioavailability/cytotoxicity study with human cell lines. Environment International, 2020, 145, 106122.	10.0	29
59	Endophytic inoculation coupled with soil amendment and foliar inhibitor ensure phytoremediation and argo-production in cadmium contaminated soil under oilseed rape-rice rotation system. Science of the Total Environment, 2020, 748, 142481.	8.0	28
60	Functionalized biochars: Synthesis, characterization, and applications for removing trace elements from water. Journal of Hazardous Materials, 2022, 437, 129337.	12.4	28
61	Assessing the immobilization efficiency of organic and inorganic amendments for cadmium phytoavailability to wheat. Journal of Soils and Sediments, 2019, 19, 3708-3717.	3.0	26
62	Hydrothermal conversion of Cd/Zn hyperaccumulator (Sedum alfredii) for heavy metal separation and hydrochar production. Journal of Hazardous Materials, 2022, 423, 127122.	12.4	25
63	Mechanisms of water regime effects on uptake of cadmium and nitrate by two ecotypes of water spinach (Ipomoea aquatica Forsk.) in contaminated soil. Chemosphere, 2020, 246, 125798.	8.2	24
64	The Cd phytoextraction potential of hyperaccumulator Sedum alfredii-oilseed rape intercropping system under different soil types and comprehensive benefits evaluation under field conditions. Environmental Pollution, 2021, 285, 117504.	7.5	24
65	Rhizobium rhizogenes-mediated root proliferation in Cd/Zn hyperaccumulator Sedum alfredii and its effects on plant growth promotion, root exudates and metal uptake efficiency. Journal of Hazardous Materials, 2022, 424, 127442.	12.4	24
66	A field study reveals links between hyperaccumulating Sedum plants-associated bacterial communities and Cd/Zn uptake and translocation. Science of the Total Environment, 2022, 805, 150400.	8.0	22
67	Double-edged effects of polyvinyl chloride addition on heavy metal separation and biochar production during pyrolysis of Cd/Zn hyperaccumulator. Journal of Hazardous Materials, 2021, 416, 125793.	12.4	21
68	Pseudomonas fluorescens accelerates a reverse and long-distance transport of cadmium and sucrose in the hyperaccumulator plant Sedum alfredii. Chemosphere, 2020, 256, 127156.	8.2	21
69	Effect of elevated CO₂ concentration on photosynthetic characteristics of hyperaccumulator Sedum alfredii under cadmium stress. Journal of Integrative Plant Biology, 2015, 57, 653-660.	8.5	19
70	A rapid method for sensitive profiling of folates from plant leaf by ultra-performance liquid chromatography coupled to tandem quadrupole mass spectrometer. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2017, 1040, 169-179.	2.3	18
71	Toxic Metal Pollution and Ecological Risk Assessment in Sediments of Water Reservoirs in Southeast China. Soil and Sediment Contamination, 2019, 28, 695-715.	1.9	18
72	Cadmium mobility in three contaminated soils amended with different additives as evaluated by dynamic flow-through experiments. Chemosphere, 2020, 261, 127763.	8.2	18

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73	Competitive sorption and desorption of cadmium and lead in paddy soils of eastern China. Environmental Earth Sciences, 2013, 68, 1599-1607.	2.7	17
74	Elevated CO2 concentration increase the mobility of Cd and Zn in the rhizosphere of hyperaccumulator Sedum alfredii. Environmental Science and Pollution Research, 2014, 21, 5899-5908.	5.3	17
75	A phytoremediation coupled with agro-production mode suppresses Fusarium wilt disease and alleviates cadmium phytotoxicity of cucumber (Cucumis sativus L.) in continuous cropping greenhouse soil. Chemosphere, 2021, 270, 128634.	8.2	15
76	Spatial variation and fractionation of fluoride in tobacco-planted soils and leaf fluoride concentration in tobacco in Bijie City, Southwest China. Environmental Science and Pollution Research, 2021, 28, 26112-26123.	5.3	15
77	Cadmium phytoextraction through Brassica juncea L. under different consortia of plant growth-promoting bacteria from different ecological niches. Ecotoxicology and Environmental Safety, 2022, 237, 113541.	6.0	15
78	Dolomite Phosphate Rockâ€"Based Slow-Release Fertilizer for Agriculture and Landscapes. Communications in Soil Science and Plant Analysis, 2012, 43, 1344-1362.	1.4	14
79	Effects of CO2 application coupled with endophyte inoculation on rhizosphere characteristics and cadmium uptake by Sedum alfredii Hance in response to cadmium stress. Journal of Environmental Management, 2019, 239, 287-298.	7.8	14
80	The Removal of Antibiotics in Relation to a Microbial Community in an Integrated Constructed Wetland for Tail Water Decontamination. Wetlands, 2020, 40, 993-1004.	1.5	14
81	Preincubation and vermicomposting of divergent biosolids exhibit vice versa multielements stoichiometry and earthworm physiology. Journal of Environmental Management, 2019, 243, 144-156.	7.8	13
82	Accumulation and distribution of cadmium and lead in 28 oilseed rape cultivars grown in a contaminated field. Environmental Science and Pollution Research, 2020, 27, 2400-2411.	5.3	13
83	A hyperaccumulator plant Sedum alfredii recruits Cd/Zn-tolerant but not Pb-tolerant endospheric bacterial communities from its rhizospheric soil. Plant and Soil, 2020, 455, 257-270.	3.7	12
84	COVID-19 Crisis: How Can Plant Biotechnology Help?. Plants, 2021, 10, 352.	3.5	12
85	Effects of CO2 application and endophytic bacterial inoculation on morphological properties, photosynthetic characteristics and cadmium uptake of two ecotypes of Sedum alfredii Hance. Environmental Science and Pollution Research, 2019, 26, 1809-1820.	5.3	10
86	Leaching Behavior of Heavy Metals In Biosolids Amended Sandy Soils. Compost Science and Utilization, 2008, 16, 144-151.	1.2	9
87	Genetic and physiological regulation of folate in pak choi (Brassica rapa subsp. Chinensis) germplasm. Journal of Experimental Botany, 2020, 71, 4914-4929.	4.8	8
88	Phytoavailability, translocation and soil thresholds derivation of cadmium for food safety through soil-wheat (Triticum aestivum L.) system. Environmental Science and Pollution Research, 2021, 28, 37716-37726.	5.3	8
89	Cataloging of Cd Allocation in Late Rice Cultivars Grown in Polluted Gleysol: Implications for Selection of Cultivars with Minimal Risk to Human Health. International Journal of Environmental Research and Public Health, 2020, 17, 3632.	2.6	4
90	Comparative assessment of Brassica pekinensis L. genotypes for phytoavoidation of nitrate, cadmium and lead in multi-pollutant field. International Journal of Phytoremediation, 2020, 22, 972-985.	3.1	3

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91	Cadmium accumulation in rice straws and derived biochars as affected by metal exposure, soil types and rice genotypes. International Journal of Phytoremediation, 2021, , 1-10.	3.1	2
92	Application of biochar for attenuating heavy metals in contaminated soil: potential implications and research gaps. , 2022, , 77-110.		0