Jose R Peralta-Videa

List of Publications by Year
in descending order

197 papers	19,704 citations	9786 73 h-index	11607 135 g-index
200 all docs	200 docs citations	200 times ranked	13728 citing authors

#	Article	IF	Citations
1	Interaction of Nanoparticles with Edible Plants and Their Possible Implications in the Food Chain. Journal of Agricultural and Food Chemistry, 2011, 59, 3485-3498.	5.2	1,037
2	Alfalfa Sprouts:Â A Natural Source for the Synthesis of Silver Nanoparticles. Langmuir, 2003, 19, 1357-1361.	3.5	866
3	Formation and Growth of Au Nanoparticles inside Live Alfalfa Plants. Nano Letters, 2002, 2, 397-401.	9.1	795
4	The biochemistry of environmental heavy metal uptake by plants: Implications for the food chain. International Journal of Biochemistry and Cell Biology, 2009, 41, 1665-1677.	2.8	704
5	Evidence of the Differential Biotransformation and Genotoxicity of ZnO and CeO₂ Nanoparticles on Soybean (<i>Glycine max</i>) Plants. Environmental Science & Technology, 2010, 44, 7315-7320.	10.0	521
6	Nanomaterials and the environment: A review for the biennium 2008â€"2010. Journal of Hazardous Materials, 2011, 186, 1-15.	12.4	495
7	Size controlled gold nanoparticle formation by Avena sativa biomass: use of plants in nanobiotechnology. Journal of Nanoparticle Research, 2004, 6, 377-382.	1.9	420
8	Synchrotron Verification of TiO₂ Accumulation in Cucumber Fruit: A Possible Pathway of TiO₂ Nanoparticle Transfer from Soil into the Food Chain. Environmental Science & Technology, 2013, 47, 11592-11598.	10.0	336
9	X-ray Absorption Spectroscopy (XAS) Corroboration of the Uptake and Storage of CeO₂ Nanoparticles and Assessment of Their Differential Toxicity in Four Edible Plant Species. Journal of Agricultural and Food Chemistry, 2010, 58, 3689-3693.	5.2	329
10	<i>In Situ</i> Synchrotron X-ray Fluorescence Mapping and Speciation of CeO₂ and ZnO Nanoparticles in Soil Cultivated Soybean (Glycine max). ACS Nano, 2013, 7, 1415-1423.	14.6	327
11	Recent advances in nano-enabled fertilizers and pesticides: a critical review of mechanisms of action. Environmental Science: Nano, 2019, 6, 2002-2030.	4.3	314
12	Exposure of engineered nanomaterials to plants: Insights into the physiological and biochemical responses-A review. Plant Physiology and Biochemistry, 2017, 110, 236-264.	5.8	312
13	Effect of Cerium Oxide Nanoparticles on Rice: A Study Involving the Antioxidant Defense System and In Vivo Fluorescence Imaging. Environmental Science & Technology, 2013, 47, 5635-5642.	10.0	289
14	Comparative environmental fate and toxicity of copper nanomaterials. NanoImpact, 2017, 7, 28-40.	4.5	277
15	Influence of CeO₂ and ZnO Nanoparticles on Cucumber Physiological Markers and Bioaccumulation of Ce and Zn: A Life Cycle Study. Journal of Agricultural and Food Chemistry, 2013, 61, 11945-11951.	5.2	273
16	CeO₂ and ZnO Nanoparticles Change the Nutritional Qualities of Cucumber (<i>Cucumis) Tj ETQq0 0 0 rgBT /Overlock 10	5.2	269
17	Evidence of Translocation and Physiological Impacts of Foliar Applied CeO₂ Nanoparticles on Cucumber (<i>Cucumis sativus</i>) Plants. Environmental Science & Technology, 2014, 48, 4376-4385.	10.0	257
18	Stress Response and Tolerance of Zea mays to CeO₂ Nanoparticles: Cross Talk among H₂O₂, Heat Shock Protein, and Lipid Peroxidation. ACS Nano, 2012, 6, 9615-9622.	14.6	254

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19	Synchrotron Micro-XRF and Micro-XANES Confirmation of the Uptake and Translocation of TiO₂ Nanoparticles in Cucumber (<i>Cucumis sativus</i>) Plants. Environmental Science & Technology, 2012, 46, 7637-7643.	10.0	236
20	Interaction of metal oxide nanoparticles with higher terrestrial plants: Physiological and biochemical aspects. Plant Physiology and Biochemistry, 2017, 110, 210-225.	5.8	230
21	Phytoremediation of heavy metals and study of the metal coordination by X-ray absorption spectroscopy. Coordination Chemistry Reviews, 2005, 249, 1797-1810.	18.8	222
22	Physiological effects of nanoparticulate ZnO in green peas (Pisum sativum L.) cultivated in soil. Metallomics, 2014, 6, 132-138.	2.4	220
23	Transport of Zn in a sandy loam soil treated with ZnO NPs and uptake by corn plants: Electron microprobe and confocal microscopy studies. Chemical Engineering Journal, 2012, 184, 1-8.	12.7	213
24	Effect of Cerium Oxide Nanoparticles on the Quality of Rice (Oryza sativa L.) Grains. Journal of Agricultural and Food Chemistry, 2013, 61, 11278-11285.	5.2	212
25	Toxic effects of copper-based nanoparticles or compounds to lettuce (Lactuca sativa) and alfalfa (Medicago sativa). Environmental Sciences: Processes and Impacts, 2015, 17, 177-185.	3.5	208
26	Effect of surface coating and organic matter on the uptake of CeO2 NPs by corn plants grown in soil: Insight into the uptake mechanism. Journal of Hazardous Materials, 2012, 225-226, 131-138.	12.4	207
27	Exposure studies of coreâ€“shell Fe/Fe3O4 and Cu/CuO NPs to lettuce (Lactuca sativa) plants: Are they a potential physiological and nutritional hazard?. Journal of Hazardous Materials, 2014, 267, 255-263.	12.4	207
28	Cerium Oxide Nanoparticles Modify the Antioxidative Stress Enzyme Activities and Macromolecule Composition in Rice Seedlings. Environmental Science & Technology, 2013, 47, 14110-14118.	10.0	203
29	Cerium Oxide Nanoparticles Impact Yield and Modify Nutritional Parameters in Wheat (<i>Triticum) Tj ETQq1 1 0.784314 rgBT /Overlo	5.2	197
30	Plant-based green synthesis of metallic nanoparticles: scientific curiosity or a realistic alternative to chemical synthesis?. Nanotechnology for Environmental Engineering, 2016, 1, 1.	3.3	182
31	Determination of thermodynamic parameters of Cr(VI) adsorption from aqueous solution onto Agave lechuguilla biomass. Journal of Chemical Thermodynamics, 2005, 37, 343-347.	2.0	176
32	Monitoring the Environmental Effects of CeO₂ and ZnO Nanoparticles Through the Life Cycle of Corn (<i>Zea mays</i>) Plants and in Situ Î¼-XRF Mapping of Nutrients in Kernels. Environmental Science & Technology, 2015, 49, 2921-2928.	10.0	175
33	Comparative phytotoxicity of ZnO NPs, bulk ZnO, and ionic zinc onto the alfalfa plants symbiotically associated with Sinorhizobium meliloti in soil. Science of the Total Environment, 2015, 515-516, 60-69.	8.0	171
34	Effects of Silver Nanoparticles on Radish Sprouts: Root Growth Reduction and Modifications in the Nutritional Value. Frontiers in Plant Science, 2016, 7, 90.	3.6	170
35	Cadmium uptake and translocation in tumbleweed (Salsola kali), a potential Cd-hyperaccumulator desert plant species: ICP/OES and XAS studies. Chemosphere, 2004, 55, 1159-1168.	8.2	167
36	Cerium dioxide and zinc oxide nanoparticles alter the nutritional value of soil cultivated soybean plants. Plant Physiology and Biochemistry, 2014, 80, 128-135.	5.8	166

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37	Metabolomics Reveals How Cucumber (<i>Cucumis sativus</i>) Reprograms Metabolites To Cope with Silver Ions and Silver Nanoparticle-Induced Oxidative Stress. Environmental Science & Technology, 2018, 52, 8016-8026.	10.0	165
38	Physiological and Biochemical Changes Imposed by CeO₂ Nanoparticles on Wheat: A Life Cycle Field Study. Environmental Science & Technology, 2015, 49, 11884-11893.	10.0	164
39	Toxicity Assessment of Cerium Oxide Nanoparticles in Cilantro (Coriandrum sativum L.) Plants Grown in Organic Soil. Journal of Agricultural and Food Chemistry, 2013, 61, 6224-6230.	5.2	162
40	Supported and unsupported nanomaterials for water and soil remediation: Are they a useful solution for worldwide pollution?. Journal of Hazardous Materials, 2014, 280, 487-503.	12.4	160
41	Effects of ZnO nanoparticles in alfalfa, tomato, and cucumber at the germination stage: Root development and X-ray absorption spectroscopy studies. Pure and Applied Chemistry, 2013, 85, 2161-2174.	1.9	157
42	Plant uptake and translocation of contaminants of emerging concern in soil. Science of the Total Environment, 2018, 636, 1585-1596.	8.0	156
43	Exposure of cerium oxide nanoparticles to kidney bean shows disturbance in the plant defense mechanisms. Journal of Hazardous Materials, 2014, 278, 279-287.	12.4	153
44	Uptake and Reduction of Cr(VI) to Cr(III) by Mesquite (Prosopis spp.):â€‰ Chromateâˆ'Plant Interaction in Hydroponics and Solid Media Studied Using XAS. Environmental Science & Technology, 2003, 37, 1859-1864.	10.0	147
45	Biosorption of Cd(II), Cr(III), and Cr(VI) by saltbush (Atriplex canescens) biomass: Thermodynamic and isotherm studies. Journal of Colloid and Interface Science, 2006, 300, 100-104.	9.4	147
46	Physiological and biochemical response of soil-grown barley (Hordeum vulgare L.) to cerium oxide nanoparticles. Environmental Science and Pollution Research, 2015, 22, 10551-10558.	5.3	146
47	Nanomaterials in the Environment: From Materials to High-Throughput Screening to Organisms. ACS Nano, 2011, 5, 13-20.	14.6	145
48	Lessons learned: Are engineered nanomaterials toxic to terrestrial plants?. Science of the Total Environment, 2016, 568, 470-479.	8.0	144
49	Foliar applied nanoscale and microscale CeO2 and CuO alter cucumber (Cucumis sativus) fruit quality. Science of the Total Environment, 2016, 563-564, 904-911.	8.0	138
50	Enhancement of lead uptake by alfalfa (Medicago sativa) using EDTA and a plant growth promoter. Chemosphere, 2005, 61, 595-598.	8.2	135
51	Interaction of titanium dioxide nanoparticles with soil components and plants: current knowledge and future research needs â€" a critical review. Environmental Science: Nano, 2018, 5, 257-278.	4.3	134
52	Manganese Nanoparticles Control Salinity-Modulated Molecular Responses in <i>Capsicum annuum</i> L. through Priming: A Sustainable Approach for Agriculture. ACS Sustainable Chemistry and Engineering, 2020, 8, 1427-1436.	6.7	132
53	Effects of Glomus deserticola inoculation on Prosopis: Enhancing chromium and lead uptake and translocation as confirmed by X-ray mapping, ICP-OES and TEM techniques. Environmental and Experimental Botany, 2010, 68, 139-148.	4.2	126
54	Copper nanoparticles/compounds impact agronomic and physiological parameters in cilantro (Coriandrum sativum). Environmental Sciences: Processes and Impacts, 2015, 17, 1783-1793.	3.5	125

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55	Effects of uncoated and citric acid coated cerium oxide nanoparticles, bulk cerium oxide, cerium acetate, and citric acid on tomato plants. Science of the Total Environment, 2016, 563-564, 956-964.	8.0	123
56	Differential Uptake and Transport of Trivalent and Hexavalent Chromium by Tumbleweed (Salsola kali). Archives of Environmental Contamination and Toxicology, 2005, 48, 225-232.	4.1	116
57	Use of phytofiltration technologies in the removal of heavy metals: A review. Pure and Applied Chemistry, 2004, 76, 801-813.	1.9	112
58	Determination of arsenic(III) and arsenic(V) binding to microwave assisted hydrothermal synthetically prepared Fe3O4, Mn3O4, and MnFe2O4 nanoadsorbents. Microchemical Journal, 2009, 91, 100-106.	4.5	112
59	Cerium oxide nanoparticles alter the antioxidant capacity but do not impact tuber ionome in Raphanus sativus (L). Plant Physiology and Biochemistry, 2014, 84, 277-285.	5.8	107
60	Applications of synchrotron Î¼-XRF to study the distribution of biologically important elements in different environmental matrices: A review. Analytica Chimica Acta, 2012, 755, 1-16.	5.4	105
61	Finding the conditions for the beneficial use of ZnO nanoparticles towards plants-A review. Environmental Pollution, 2018, 241, 1175-1181.	7.5	105
62	Screening the phytoremediation potential of desert broom (Baccharis sarothroides Gray) growing on mine tailings in Arizona, USA. Environmental Pollution, 2008, 153, 362-368.	7.5	102
63	ZnO nanoparticle fate in soil and zinc bioaccumulation in corn plants (Zea mays) influenced by alginate. Environmental Sciences: Processes and Impacts, 2013, 15, 260-266.	3.5	99
64	Environmental Effects of Nanoceria on Seed Production of Common Bean (<i>Phaseolus vulgaris</i>): A Proteomic Analysis. Environmental Science & Technology, 2015, 49, 13283-13293.	10.0	95
65	ZnO nanoparticles increase photosynthetic pigments and decrease lipid peroxidation in soil grown cilantro (Coriandrum sativum). Plant Physiology and Biochemistry, 2018, 132, 120-127.	5.8	94
66	Role of Cerium Compounds in Fusarium Wilt Suppression and Growth Enhancement in Tomato (<i>Solanum lycopersicum</i>). Journal of Agricultural and Food Chemistry, 2018, 66, 5959-5970.	5.2	91
67	Impacts of copper oxide nanoparticles on bell pepper (<i>Capsicum annum</i>L.) plants: a full life cycle study. Environmental Science: Nano, 2018, 5, 83-95.	4.3	89
68	Advanced Analytical Techniques for the Measurement of Nanomaterials in Food and Agricultural Samples: A Review. Environmental Engineering Science, 2013, 30, 118-125.	1.6	86
69	Cerium Biomagnification in a Terrestrial Food Chain: Influence of Particle Size and Growth Stage. Environmental Science & Technology, 2016, 50, 6782-6792.	10.0	85
70	Toxicity and biotransformation of uncoated and coated nickel hydroxide nanoparticles on mesquite plants. Environmental Toxicology and Chemistry, 2010, 29, 1146-1154.	4.3	84
71	Determination of adsorption and speciation of chromium species by saltbush (Atriplex canescens) biomass using a combination of XAS and ICPâ€“OES. Microchemical Journal, 2005, 81, 122-132.	4.5	82
72	Differential Toxicity of Bare and Hybrid ZnO Nanoparticles in Green Pea (Pisum sativum L.): A Life Cycle Study. Frontiers in Plant Science, 2015, 6, 1242.	3.6	82

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73	Comparative toxicity assessment of CeO2 and ZnO nanoparticles towards Sinorhizobium meliloti, a symbiotic alfalfa associated bacterium: Use of advanced microscopic and spectroscopic techniques. Journal of Hazardous Materials, 2012, 241-242, 379-386.	12.4	80
74	Surface coating changes the physiological and biochemical impacts of nano-TiO2 in basil (Ocimum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	7.5	74
75	Improvement of nutrient elements and allicin content in green onion (Allium fistulosum) plants exposed to CuO nanoparticles. Science of the Total Environment, 2020, 725, 138387.	8.0	73
76	Use of ICP and XAS to determine the enhancement of gold phytoextraction by Chilopsis linearis using thiocyanate as a complexing agent. Analytical and Bioanalytical Chemistry, 2005, 382, 347-352.	3.7	70
77	Sorption kinetic study of selenite and selenate onto a high and low pressure aged iron oxide nanomaterial. Journal of Hazardous Materials, 2012, 211-212, 138-145.	12.4	70
78	Soil organic matter influences cerium translocation and physiological processes in kidney bean plants exposed to cerium oxide nanoparticles. Science of the Total Environment, 2016, 569-570, 201-211.	8.0	69
79	Using FTIR to corroborate the identity of functional groups involved in the binding of Cd and Cr to saltbush (Atriplex canescens) biomass. Chemosphere, 2007, 66, 1424-1430.	8.2	67
80	Synthesis of protonated chitosan flakes for the removal of vanadium(III, IV and V) oxyanions from aqueous solutions. Microchemical Journal, 2015, 118, 1-11.	4.5	67
81	Heavy Metal Toxicity in Plants. , 2010, , 71-97.		65
82	Thermodynamic and isotherm studies of the biosorption of Cu(II), Pb(II), and Zn(II) by leaves of saltbush (Atriplex canescens). Journal of Chemical Thermodynamics, 2007, 39, 488-492.	2.0	62
83	Toxicity of Arsenic (III) and (V) on Plant Growth, Element Uptake, and Total Amylolytic Activity of Mesquite (<i>Prosopis Juliflora</i>x<i>P. Velutina</i>). International Journal of Phytoremediation, 2008, 10, 47-60.	3.1	62
84	Anisotropic gold nanoparticles and gold plates biosynthesis using alfalfa extracts. Journal of Nanoparticle Research, 2011, 13, 3113-3121.	1.9	61
85	Physiological and biochemical responses of sunflower (Helianthus annuus L.) exposed to nano-CeO2 and excess boron: Modulation of boron phytotoxicity. Plant Physiology and Biochemistry, 2017, 110, 50-58.	5.8	60
86	Toxicity and biotransformation of ZnO nanoparticles in the desert plants Prosopis juliflora-velutina, Salsola tragus and Parkinsonia florida. International Journal of Nanotechnology, 2011, 8, 492.	0.2	59
87	Differential effects of copper nanoparticles/microparticles in agronomic and physiological parameters of oregano (Origanum vulgare). Science of the Total Environment, 2018, 618, 306-312.	8.0	59
88	Physiological and biochemical effects of nanoparticulate copper, bulk copper, copper chloride, and kinetin in kidney bean (Phaseolus vulgaris) plants. Science of the Total Environment, 2017, 599-600, 2085-2094.	8.0	58
89	Elevated CO2 levels modify TiO2 nanoparticle effects on rice and soil microbial communities. Science of the Total Environment, 2017, 578, 408-416.	8.0	58
90	Effects of nano-enabled agricultural strategies on food quality: Current knowledge and future research needs. Journal of Hazardous Materials, 2021, 401, 123385.	12.4	58

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91	Potential ofChilopsis Linearisfor Gold Phytomining: Using Xas to Determine Gold Reduction and Nanoparticle Formation Within Plant Tissues. International Journal of Phytoremediation, 2007, 9, 133-147.	3.1	57
92	Examination of arsenic(III) and (V) uptake by the desert plant species mesquite (Prosopis spp.) using X-ray absorption spectroscopy. Science of the Total Environment, 2007, 379, 249-255.	8.0	57
93	Comparison of the effects of commercial coated and uncoated ZnO nanomaterials and Zn compounds in kidney bean (Phaseolus vulgaris) plants. Journal of Hazardous Materials, 2017, 332, 214-222.	12.4	57
94	A soil mediated phyto-toxicological study of iron doped zinc oxide nanoparticles (Fe@ZnO) in green peas (Pisum sativum L.). Chemical Engineering Journal, 2014, 258, 394-401.	12.7	55
95	Selenite bioreduction and biosynthesis of selenium nanoparticles by Bacillus paramycoides SP3 isolated from coal mine overburden leachate. Environmental Pollution, 2021, 285, 117519.	7.5	54
96	Nutritional quality assessment of tomato fruits after exposure to uncoated and citric acid coated cerium oxide nanoparticles, bulk cerium oxide, cerium acetate and citric acid. Plant Physiology and Biochemistry, 2017, 110, 100-107.	5.8	53
97	C60 Fullerols Enhance Copper Toxicity and Alter the Leaf Metabolite and Protein Profile in Cucumber. Environmental Science & Technology, 2019, 53, 2171-2180.	10.0	53
98	Nutritional Status of Tomato (<i>Solanum lycopersicum</i>) Fruit Grown in <i>Fusarium</i>-Infested Soil: Impact of Cerium Oxide Nanoparticles. Journal of Agricultural and Food Chemistry, 2020, 68, 1986-1997.	5.2	51
99	Differential Effects of Cerium Oxide Nanoparticles on Rice, Wheat, and Barley Roots: A Fourier Transform Infrared (FT-IR) Microspectroscopy Study. Applied Spectroscopy, 2015, 69, 287-295.	2.2	50
100	Interactions between CeO₂ Nanoparticles and the Desert Plant Mesquite: A Spectroscopy Approach. ACS Sustainable Chemistry and Engineering, 2016, 4, 1187-1192.	6.7	49
101	Foliar Exposure of Cu(OH)₂ Nanopesticide to Basil (<i>Ocimum basilicum</i>): Variety-Dependent Copper Translocation and Biochemical Responses. Journal of Agricultural and Food Chemistry, 2018, 66, 3358-3366.	5.2	48
102	Kinetin Increases Chromium Absorption, Modulates Its Distribution, and Changes the Activity of Catalase and Ascorbate Peroxidase in Mexican Palo Verde. Environmental Science & Technology, 2011, 45, 1082-1087.	10.0	47
103	Gibberellic Acid, Kinetin, and the Mixture Indoleâ€"3-Acetic Acidâ€"Kinetin Assisted with EDTA-Induced Lead Hyperaccumulation in Alfalfa Plants. Environmental Science & Technology, 2007, 41, 8165-8170.	10.0	46
104	Toxicity of copper hydroxide nanoparticles, bulk copper hydroxide, and ionic copper to alfalfa plants: A spectroscopic and gene expression study. Environmental Pollution, 2018, 243, 703-712.	7.5	45
105	Bok choy (Brassica rapa) grown in copper oxide nanoparticles-amended soils exhibits toxicity in a phenotype-dependent manner: Translocation, biodistribution and nutritional disturbance. Journal of Hazardous Materials, 2020, 398, 122978.	12.4	45
106	Modulation of CuO nanoparticles toxicity to green pea (Pisum sativum Fabaceae) by the phytohormone indole-3-acetic acid. Science of the Total Environment, 2017, 598, 513-524.	8.0	44
107	Arsenic tolerance in mesquite (Prosopis sp.): Low molecular weight thiols synthesis and glutathione activity in response to arsenic. Plant Physiology and Biochemistry, 2009, 47, 822-826.	5.8	42
108	Utilization of ICP/OES for the determination of trace metal binding to different humic fractions. Journal of Hazardous Materials, 2003, 97, 207-218.	12.4	40

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109	Random amplified polymorphic DNA reveals that TiO2 nanoparticles are genotoxic to Cucurbita pepo. Journal of Zhejiang University: Science A, 2014, 15, 618-623.	2.4	40
110	Plant Growth and Metal Distribution in Tissues of <i>Prosopis juliflora-velutina</i> Grown on Chromium Contaminated Soil in the Presence of <i>Glomus deserticola</i>. Environmental Science & Technology, 2010, 44, 7272-7279.	10.0	39
111	Effect of ZnO nanoparticles on corn seedlings at different temperatures; X-ray absorption spectroscopy and ICP/OES studies. Microchemical Journal, 2017, 134, 54-61.	4.5	39
112	Transport and Retention Behavior of ZnO Nanoparticles in Two Natural Soils: Effect of Surface Coating and Soil Composition. Journal of Nano Research, 0, 17, 229-242.	0.8	38
113	Effects of the exposure of TiO2 nanoparticles on basil (Ocimum basilicum) for two generations. Science of the Total Environment, 2018, 636, 240-248.	8.0	38
114	Modulation of Uptake and Translocation of Iron and Copper from Root to Shoot in Common Bean by Siderophore-Producing Microorganisms. Journal of Plant Nutrition, 2005, 28, 1853-1865.	1.9	35
115	BIOCHEMICAL AND SPECTROSCOPIC STUDIES OF THE RESPONSE OF CONVOLVULUS ARVENSIS L. TO CHROMIUM(III) AND CHROMIUM(VI) STRESS. Environmental Toxicology and Chemistry, 2006, 25, 220.	4.3	35
116	Environmental behavior of coated NMs: Physicochemical aspects and plant interactions. Journal of Hazardous Materials, 2018, 347, 196-217.	12.4	34
117	Recent insights into the impact, fate and transport of cerium oxide nanoparticles in the plant-soil continuum. Ecotoxicology and Environmental Safety, 2021, 221, 112403.	6.0	34
118	Microscopic and Spectroscopic Methods Applied to the Measurements of Nanoparticles in the Environment. Applied Spectroscopy Reviews, 2012, 47, 180-206.	6.7	33
119	Production of low-molecular weight thiols as a response to cadmium uptake by tumbleweed (Salsola) Tj ETQq1 1 0.784314 rgBT /Ove	5.8	32
120	Assessing plant uptake and transport mechanisms of engineered nanomaterials from soil. MRS Bulletin, 2017, 42, 379-384.	3.5	31
121	Alginate modifies the physiological impact of CeO2 nanoparticles in corn seedlings cultivated in soil. Journal of Environmental Sciences, 2014, 26, 382-389.	6.1	29
122	Biochemical and physiological effects of copper compounds/nanoparticles on sugarcane (Saccharum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	8.0	29
123	Hydrogen sulfide (H2S) underpins the beneficial silicon effects against the copper oxide nanoparticles (CuO NPs) phytotoxicity in Oryza sativa seedlings. Journal of Hazardous Materials, 2021, 415, 124907.	12.4	29
124	Localization and Speciation of Arsenic in Soil and Desert Plant <i>Parkinsonia florida</i> Using Î¼XRF and Î¼XANES. Environmental Science & Technology, 2011, 45, 7848-7854.	10.0	28
125	Nutritional quality of bean seeds harvested from plants grown in different soils amended with coated and uncoated zinc oxide nanomaterials. Environmental Science: Nano, 2017, 4, 2336-2347.	4.3	27
126	Minimal Transgenerational Effect of ZnO Nanomaterials on the Physiology and Nutrient Profile of <i>Phaseolus vulgaris</i>. ACS Sustainable Chemistry and Engineering, 2018, 6, 7924-7930.	6.7	27

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127	Nanomaterials in Agricultural Production: Benefits and Possible Threats?. ACS Symposium Series, 2013, , 73-90.	0.5	26
128	Factors affecting fate and transport of engineered nanomaterials in terrestrial environments. Current Opinion in Environmental Science and Health, 2018, 6, 47-53.	4.1	26
129	Spectroscopic Study of the Impact of Arsenic Speciation on Arsenic/Phosphorus Uptake and Plant Growth in Tumbleweed (Salsola kali). Environmental Science & Technology, 2006, 40, 1991-1996.	10.0	25
130	Effects of Lead, EDTA, and IAA on Nutrient Uptake by Alfalfa Plants. Journal of Plant Nutrition, 2007, 30, 1247-1261.	1.9	25
131	Use of X-ray absorption spectroscopy and biochemical techniques to characterize arsenic uptake and reduction in pea (Pisum sativum) plants. Plant Physiology and Biochemistry, 2007, 45, 457-463.	5.8	25
132	Effects of different surface-coated nTiO2 on full-grown carrot plants: Impacts on root splitting, essential elements, and Ti uptake. Journal of Hazardous Materials, 2021, 402, 123768.	12.4	25
133	Silicon nanoforms in crop improvement and stress management. Chemosphere, 2022, 305, 135165.	8.2	25
134	ROLE OF ETHYLENEDIAMINETETRAACETIC ACID ON LEAD UPTAKE AND TRANSLOCATION BY TUMBLEWEED (SALSOLA KALI L). Environmental Toxicology and Chemistry, 2007, 26, 1033.	4.3	24
135	EFFECT OF INDOLE-3-ACETIC ACID, KINETIN, AND ETHYLENEDIAMINETETRAACETIC ACID ON PLANT GROWTH AND UPTAKE AND TRANSLOCATION OF LEAD, MICRONUTRIENTS, AND MACRONUTRIENTS IN ALFALFA PLANTS. International Journal of Phytoremediation, 2009, 11, 131-149.	3.1	24
136	The extraction of gold nanoparticles from oat and wheat biomasses using sodium citrate and cetyltrimethylammonium bromide, studied by x-ray absorption spectroscopy, high-resolution transmission electron microscopy, and UVâ€“visible spectroscopy. Nanotechnology, 2009, 20, 105607.	2.6	24
137	Potential of Alfalfa Plant to Phytoremediate Individually Contaminated Montmorillonite-Soils with Cadmium(II), Chromium(VI), Copper (II), Nickel(II), and Zinc(II). Bulletin of Environmental Contamination and Toxicology, 2002, 69, 74-81.	2.7	23
138	Lead Uptake and the Effects of EDTA on Lead-Tissue Concentrations in the Desert Species Mesquite (Prosopisspp.). International Journal of Phytoremediation, 2004, 6, 195-207.	3.1	23
139	Removal of copper, lead, and zinc from contaminated water by saltbush biomass: Analysis of the optimum binding, stripping, and binding mechanism. Bioresource Technology, 2008, 99, 4438-4444.	9.6	23
140	Effect of mercury and gold on growth, nutrient uptake, and anatomical changes in Chilopsis linearis. Environmental and Experimental Botany, 2009, 65, 253-262.	4.2	23
141	Copper oxide nanoparticles and bulk copper oxide, combined with indole-3-acetic acid, alter aluminum, boron, and iron in Pisum sativum seeds. Science of the Total Environment, 2018, 634, 1238-1245.	8.0	23
142	Nanoparticles as a potential protective agent for arsenic toxicity alleviation in plants. Environmental Pollution, 2022, 300, 118887.	7.5	23
143	Two-Photon Microscopy and Spectroscopy Studies to Determine the Mechanism of Copper Oxide Nanoparticle Uptake by Sweetpotato Roots during Postharvest Treatment. Environmental Science & Technology, 2018, 52, 9954-9963.	10.0	22
144	LEAD TOXICITY IN ALFALFA PLANTS EXPOSED TO PHYTOHORMONES AND ETHYLENEDIAMINETETRAACETIC ACID MONITORED BY PEROXIDASE, CATALASE, AND AMYLASE ACTIVITIES. Environmental Toxicology and Chemistry, 2007, 26, 2717.	4.3	21

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145	Modeling the adsorption of Cr(III) from aqueous solution onto Agave lechuguilla biomass: Study of the advective and dispersive transport. Journal of Hazardous Materials, 2009, 161, 360-365.	12.4	21
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