Jose R Peralta-Videa

List of Publications by Citations

195 papers	15,802 citations	68 h-index	122 g-index
200 ext. papers	17,409 ext. citations	7 avg, IF	6.67 L-index

#	Paper	IF	Citations
195	Interaction of nanoparticles with edible plants and their possible implications in the food chain. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 3485-98	5.7	841
194	Alfalfa Sprouts: A Natural Source for the Synthesis of Silver Nanoparticles. *Langmuir*, **2003**, 19, 1357-1361	4	727
193	Formation and Growth of Au Nanoparticles inside Live Alfalfa Plants. *Nano Letters*, **2002**, 2, 397-401	11.5	696
192	The biochemistry of environmental heavy metal uptake by plants: implications for the food chain. *International Journal of Biochemistry and Cell Biology*, **2009**, 41, 1665-77	5.6	535
191	Evidence of the differential biotransformation and genotoxicity of ZnO and CeO2 nanoparticles on soybean (Glycine max) plants. *Environmental Science & Technology*, **2010**, 44, 7315-20	10.3	453
190	Nanomaterials and the environment: a review for the biennium 2008-2010. *Journal of Hazardous Materials*, **2011**, 186, 1-15	12.8	413
189	Size controlled gold nanoparticle formation by Avena sativa biomass: use of plants in nanobiotechnology. *Journal of Nanoparticle Research*, **2004**, 6, 377-382	2.3	339
188	X-ray absorption spectroscopy (XAS) corroboration of the uptake and storage of CeO(2) nanoparticles and assessment of their differential toxicity in four edible plant species. *Journal of Agricultural and Food Chemistry*, **2010**, 58, 3689-93	5.7	294
187	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, 11592-8	10.3	281
186	In situ synchrotron X-ray fluorescence mapping and speciation of CeO and ZnO nanoparticles in soil cultivated soybean (Glycine max). *ACS Nano*, **2013**, 7, 1415-23	16.7	277
185	Effect of cerium oxide nanoparticles on rice: a study involving the antioxidant defense system and in vivo fluorescence imaging. *Environmental Science & Technology*, **2013**, 47, 5635-42	10.3	244
184	Exposure of engineered nanomaterials to plants: Insights into the physiological and biochemical responses-A review. *Plant Physiology and Biochemistry*, **2017**, 110, 236-264	5.4	240
183	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, 11945-51	5.7	220
182	CeO and ZnO nanoparticles change the nutritional qualities of cucumber (Cucumis sativus). *Journal of Agricultural and Food Chemistry*, **2014**, 62, 2752-9	5.7	216
181	Evidence of translocation and physiological impacts of foliar applied CeO2 nanoparticles on cucumber (Cucumis sativus) plants. *Environmental Science & Technology*, **2014**, 48, 4376-85	10.3	215
180	Stress response and tolerance of Zea mays to CeO2 nanoparticles: cross talk among H2O2, heat shock protein, and lipid peroxidation. *ACS Nano*, **2012**, 6, 9615-22	16.7	214
179	Comparative environmental fate and toxicity of copper nanomaterials. *NanoImpact*, **2017**, 7, 28-40	5.6	208

178	Synchrotron micro-XRF and micro-XANES confirmation of the uptake and translocation of TiO nanoparticles in cucumber (Cucumis sativus) plants. *Environmental Science & Technology*, **2012**, 46, 7637-43	10.3	192
177	Phytoremediation of heavy metals and study of the metal coordination by X-ray absorption spectroscopy. *Coordination Chemistry Reviews*, **2005**, 249, 1797-1810	23.2	187
176	Interaction of metal oxide nanoparticles with higher terrestrial plants: Physiological and biochemical aspects. *Plant Physiology and Biochemistry*, **2017**, 110, 210-225	5.4	183
175	Physiological effects of nanoparticulate ZnO in green peas (Pisum sativum L.) cultivated in soil. *Metallomics*, **2014**, 6, 132-8	4.5	178
174	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	14.7	178
173	Recent advances in nano-enabled fertilizers and pesticides: a critical review of mechanisms of action. *Environmental Science: Nano*, **2019**, 6, 2002-2030	7.1	177
172	Effect of cerium oxide nanoparticles on the quality of rice (Oryza sativa L.) grains. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 11278-85	5.7	175
171	Toxic effects of copper-based nanoparticles or compounds to lettuce (Lactuca sativa) and alfalfa (Medicago sativa). *Environmental Sciences: Processes and Impacts*, **2015**, 17, 177-85	4.3	173
170	Exposure studies of core-shell Fe/Fe(3)O(4) and Cu/CuO NPs to lettuce (Lactuca sativa) plants: Are they a potential physiological and nutritional hazard?. *Journal of Hazardous Materials*, **2014**, 267, 255-63	12.8	173
169	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, 131-8	12.8	170
168	Cerium oxide nanoparticles modify the antioxidative stress enzyme activities and macromolecule composition in rice seedlings. *Environmental Science & Technology*, **2013**, 47, 14110-8	10.3	168
167	Cerium oxide nanoparticles impact yield and modify nutritional parameters in wheat (Triticum aestivum L.). *Journal of Agricultural and Food Chemistry*, **2014**, 62, 9669-75	5.7	159
166	Determination of thermodynamic parameters of Cr(VI) adsorption from aqueous solution onto Agave lechuguilla biomass. *Journal of Chemical Thermodynamics*, **2005**, 37, 343-347	2.9	151
165	Monitoring the environmental effects of CeO2 and ZnO nanoparticles through the life cycle of corn (Zea mays) plants and in situ EXRF mapping of nutrients in kernels. *Environmental Science & Technology*, **2015**, 49, 2921-8	10.3	148
164	Cerium dioxide and zinc oxide nanoparticles alter the nutritional value of soil cultivated soybean plants. *Plant Physiology and Biochemistry*, **2014**, 80, 128-35	5.4	144
163	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	12.8	143
162	Cadmium uptake and translocation in tumbleweed (Salsola kali), a potential Cd-hyperaccumulator desert plant species: ICP/OES and XAS studies. *Chemosphere*, **2004**, 55, 1159-68	8.4	142
161	Toxicity assessment of cerium oxide nanoparticles in cilantro (Coriandrum sativum L.) plants grown in organic soil. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 6224-30	5.7	141

160	Physiological and Biochemical Changes Imposed by CeO2 Nanoparticles on Wheat: A Life Cycle Field Study. *Environmental Science & Technology*, **2015**, 49, 11884-93	10.3	134
159	Exposure of cerium oxide nanoparticles to kidney bean shows disturbance in the plant defense mechanisms. *Journal of Hazardous Materials*, **2014**, 278, 279-87	12.8	134
158	Nanomaterials in the environment: from materials to high-throughput screening to organisms. *ACS Nano*, **2011**, 5, 13-20	16.7	133
157	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, 60-9	10.2	132
156	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, 100-4	9.3	131
155	Effects of Silver Nanoparticles on Radish Sprouts: Root Growth Reduction and Modifications in the Nutritional Value. *Frontiers in Plant Science*, **2016**, 7, 90	6.2	128
154	Physiological and biochemical response of soil-grown barley (Hordeum vulgare L.) to cerium oxide nanoparticles. *Environmental Science and Pollution Research*, **2015**, 22, 10551-8	5.1	125
153	Uptake and reduction of Cr(VI) to Cr(III) by mesquite (Prosopis spp.): chromate-plant interaction in hydroponics and solid media studied using XAS. *Environmental Science & Technology*, **2003**, 37, 1859-64	10.3	120
152	Enhancement of lead uptake by alfalfa (Medicago sativa) using EDTA and a plant growth promoter. *Chemosphere*, **2005**, 61, 595-8	8.4	119
151	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	2.1	117
150	Plant-based green synthesis of metallic nanoparticles: scientific curiosity or a realistic alternative to chemical synthesis?. *Nanotechnology for Environmental Engineering*, **2016**, 1, 1	5.1	112
149	Lessons learned: Are engineered nanomaterials toxic to terrestrial plants?. *Science of the Total Environment*, **2016**, 568, 470-479	10.2	110
148	Metabolomics Reveals How Cucumber (Cucumis sativus) Reprograms Metabolites To Cope with Silver Ions and Silver Nanoparticle-Induced Oxidative Stress. *Environmental Science & Technology*, **2018**, 52, 8016-8026	10.3	108
147	Interaction of titanium dioxide nanoparticles with soil components and plants: current knowledge and future research needs – a critical review. *Environmental Science: Nano*, **2018**, 5, 257-278	7.1	107
146	Copper nanoparticles/compounds impact agronomic and physiological parameters in cilantro (Coriandrum sativum). *Environmental Sciences: Processes and Impacts*, **2015**, 17, 1783-93	4.3	101
145	Foliar applied nanoscale and microscale CeO2 and CuO alter cucumber (Cucumis sativus) fruit quality. *Science of the Total Environment*, **2016**, 563-564, 904-11	10.2	100
144	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	4.8	100
143	Use of phytofiltration technologies in the removal of heavy metals: A review. *Pure and Applied Chemistry*, **2004**, 76, 801-813	2.1	100

142	Plant uptake and translocation of contaminants of emerging concern in soil. *Science of the Total Environment*, **2018**, 636, 1585-1596	10.2	100
141	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, 956-64	10.2	97
140	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	5.9	96
139	Differential uptake and transport of trivalent and hexavalent chromium by tumbleweed (Salsola kali). *Archives of Environmental Contamination and Toxicology*, **2005**, 48, 225-32	3.2	94
138	Applications of synchrotron XRF to study the distribution of biologically important elements in different environmental matrices: a review. *Analytica Chimica Acta*, **2012**, 755, 1-16	6.6	93
137	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	5.4	91
136	Screening the phytoremediation potential of desert broom (Baccharis sarothroides Gray) growing on mine tailings in Arizona, USA. *Environmental Pollution*, **2008**, 153, 362-8	9.3	89
135	ZnO nanoparticle fate in soil and zinc bioaccumulation in corn plants (Zea mays) influenced by alginate. *Environmental Sciences: Processes and Impacts*, **2013**, 15, 260-6	4.3	88
134	Environmental Effects of Nanoceria on Seed Production of Common Bean (Phaseolus vulgaris): A Proteomic Analysis. *Environmental Science & Technology*, **2015**, 49, 13283-93	10.3	77
133	Finding the conditions for the beneficial use of ZnO nanoparticles towards plants-A review. *Environmental Pollution*, **2018**, 241, 1175-1181	9.3	75
132	Determination of adsorption and speciation of chromium species by saltbush (Atriplex canescens) biomass using a combination of XAS and ICP OES. *Microchemical Journal*, **2005**, 81, 122-132	4.8	75
131	Cerium Biomagnification in a Terrestrial Food Chain: Influence of Particle Size and Growth Stage. *Environmental Science & Technology*, **2016**, 50, 6782-92	10.3	73
130	Advanced Analytical Techniques for the Measurement of Nanomaterials in Food and Agricultural Samples: A Review. *Environmental Engineering Science*, **2013**, 30, 118-125	2	73
129	Toxicity and biotransformation of uncoated and coated nickel hydroxide nanoparticles on mesquite plants. *Environmental Toxicology and Chemistry*, **2010**, 29, 1146-54	3.8	72
128	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, 379-86	12.8	71
127	Impacts of copper oxide nanoparticles on bell pepper (Capsicum annum L.) plants: a full life cycle study. *Environmental Science: Nano*, **2018**, 5, 83-95	7.1	67
126	Role of Cerium Compounds in Fusarium Wilt Suppression and Growth Enhancement in Tomato (Solanum lycopersicum). *Journal of Agricultural and Food Chemistry*, **2018**, 66, 5959-5970	5.7	65
125	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, 347-52	4.4	60

124	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	6.2	59
123	ZnO nanoparticles increase photosynthetic pigments and decrease lipid peroxidation in soil grown cilantro (Coriandrum sativum). *Plant Physiology and Biochemistry*, **2018**, 132, 120-127	5.4	58
122	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, 1424-30	8.4	57
121	Synthesis of protonated chitosan flakes for the removal of vanadium(III, IV and V) oxyanions from aqueous solutions. *Microchemical Journal*, **2015**, 118, 1-11	4.8	56
120	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	10.2	56
119	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	1.5	53
118	Sorption kinetic study of selenite and selenate onto a high and low pressure aged iron oxide nanomaterial. *Journal of Hazardous Materials*, **2012**, 211-212, 138-45	12.8	52
117	Anisotropic gold nanoparticles and gold plates biosynthesis using alfalfa extracts. *Journal of Nanoparticle Research*, **2011**, 13, 3113-3121	2.3	52
116	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	2.9	52
115	Manganese Nanoparticles Control Salinity-Modulated Molecular Responses in Capsicum annuum L. through Priming: A Sustainable Approach for Agriculture. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1427-1436	8.3	52
114	Toxicity of arsenic (III) and (V) on plant growth, element uptake, and total amylolytic activity of mesquite (Prosopis juliflora x P. velutina). *International Journal of Phytoremediation*, **2008**, 10, 47-60	3.9	51
113	Surface coating changes the physiological and biochemical impacts of nano-TiO in basil (Ocimum basilicum) plants. *Environmental Pollution*, **2017**, 222, 64-72	9.3	49
112	Potential of Chilopsis linearis for gold phytomining: using XAS to determine gold reduction and nanoparticle formation within plant tissues. *International Journal of Phytoremediation*, **2007**, 9, 133-47	3.9	49
111	Physiological and biochemical responses of sunflower (Helianthus annuus L.) exposed to nano-CeO and excess boron: Modulation of boron phytotoxicity. *Plant Physiology and Biochemistry*, **2017**, 110, 50-58	5.4	48
110	Differential effects of copper nanoparticles/microparticles in agronomic and physiological parameters of oregano (Origanum vulgare). *Science of the Total Environment*, **2018**, 618, 306-312	10.2	48
109	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	12.8	47
108	Elevated CO levels modify TiO nanoparticle effects on rice and soil microbial communities. *Science of the Total Environment*, **2017**, 578, 408-416	10.2	46
107	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, 1082-7	10.3	46

106	Interactions between CeO2 Nanoparticles and the Desert Plant Mesquite: A Spectroscopy Approach. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1187-1192	8.3	45
105	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	14.7	45
104	Differential effects of cerium oxide nanoparticles on rice, wheat, and barley roots: a fourier transform infrared (FT-IR) microspectroscopy study. *Applied Spectroscopy*, **2015**, 69, 287-95	3.1	44
103	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, 249-55	10.2	44
102	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	5.4	43
101	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	10.2	43
100	Gibberellic acid, kinetin, and the mixture indole-3-acetic acid-kinetin assisted with EDTA-induced lead hyperaccumnulation in alfalfa plants. *Environmental Science & Technology*, **2007**, 41, 8165-70	10.3	43
99	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	10.2	38
98	Heavy Metal Toxicity in Plants **2010**, 71-97		38
97	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	10.2	37
96	Arsenic tolerance in mesquite (Prosopis sp.): low molecular weight thiols synthesis and glutathione activity in response to arsenic. *Plant Physiology and Biochemistry*, **2009**, 47, 822-6	5.4	37
95	Transport and Retention Behavior of ZnO Nanoparticles in Two Natural Soils: Effect of Surface Coating and Soil Composition. *Journal of Nano Research*, **2012**, 17, 229-242	1	36
94	Nutritional Status of Tomato () Fruit Grown in -Infested Soil: Impact of Cerium Oxide Nanoparticles. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 1986-1997	5.7	34
93	Foliar Exposure of Cu(OH) Nanopesticide to Basil (Ocimum basilicum): Variety-Dependent Copper Translocation and Biochemical Responses. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 3358-3366	5.7	34
92	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	9.3	34
91	C60 Fullerols Enhance Copper Toxicity and Alter the Leaf Metabolite and Protein Profile in Cucumber. *Environmental Science & Technology*, **2019**, 53, 2171-2180	10.3	33
90	Random amplified polymorphic DNA reveals that TiO2 nanoparticles are genotoxic to Cucurbita pepo. *Journal of Zhejiang University: Science A*, **2014**, 15, 618-623	2.1	33
89	Effects of nano-enabled agricultural strategies on food quality: Current knowledge and future research needs. *Journal of Hazardous Materials*, **2021**, 401, 123385	12.8	33

88	Biochemical and spectroscopic studies of the response of Convolvulus arvensis L. to chromium(III) and chromium(VI) stress. *Environmental Toxicology and Chemistry*, **2006**, 25, 220-6	3.8	31
87	Utilization of ICP/OES for the determination of trace metal binding to different humic fractions. *Journal of Hazardous Materials*, **2003**, 97, 207-18	12.8	31
86	Plant growth and metal distribution in tissues of Prosopis juliflora-velutina grown on chromium contaminated soil in the presence of Glomus deserticola. *Environmental Science & Technology*, **2010**, 44, 7272-9	10.3	30
85	Microscopic and Spectroscopic Methods Applied to the Measurements of Nanoparticles in the Environment. *Applied Spectroscopy Reviews*, **2012**, 47, 180-206	4.5	29
84	Production of low-molecular weight thiols as a response to cadmium uptake by tumbleweed (Salsola kali). *Plant Physiology and Biochemistry*, **2005**, 43, 491-8	5.4	29
83	Environmental behavior of coated NMs: Physicochemical aspects and plant interactions. *Journal of Hazardous Materials*, **2018**, 347, 196-217	12.8	28
82	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	2.3	28
81	Effects of the exposure of TiO nanoparticles on basil (Ocimum basilicum) for two generations. *Science of the Total Environment*, **2018**, 636, 240-248	10.2	27
80	Assessing plant uptake and transport mechanisms of engineered nanomaterials from soil. *MRS Bulletin*, **2017**, 42, 379-384	3.2	26
79	Effect of ZnO nanoparticles on corn seedlings at different temperatures; X-ray absorption spectroscopy and ICP/OES studies. *Microchemical Journal*, **2017**, 134, 54-61	4.8	26
78	Localization and speciation of arsenic in soil and desert plant Parkinsonia florida using ΜXRF and ΜXANES. *Environmental Science & Technology*, **2011**, 45, 7848-54	10.3	26
77	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	12.8	24
76	Alginate modifies the physiological impact of CeO2 nanoparticles in corn seedlings cultivated in soil. *Journal of Environmental Sciences*, **2014**, 26, 382-9	6.4	24
75	Role of ethylenediaminetetraacetic acid on lead uptake and translocation by tumbleweed (salsola kali L.). *Environmental Toxicology and Chemistry*, **2007**, 26, 1033-9	3.8	24
74	Nanomaterials in Agricultural Production: Benefits and Possible Threats?. *ACS Symposium Series*, **2013**, 73-90	0.4	23
73	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 UV-visible spectroscopy. *Nanotechnology*, **2009**, 20, 105607	3.4	23
72	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	3.9	22
71	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, 4438-44	11	22

70	Minimal Transgenerational Effect of ZnO Nanomaterials on the Physiology and Nutrient Profile of Phaseolus vulgaris. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7924-7930	8.3	22
69	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	7.1	21
68	Effects of Lead, EDTA, and IAA on Nutrient Uptake by Alfalfa Plants. *Journal of Plant Nutrition*, **2007** , 30, 1247-1261	2.3	21
67	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, 457-63	5.4	21
66	Spectroscopic study of the impact of arsenic speciation on arsenic/phosphorus uptake and plant growth in tumbleweed (Salsola kali). *Environmental Science & Technology*, **2006**, 40, 1991-6	10.3	21
65	Lead uptake and the effects of EDTA on lead-tissue concentrations in the desert species mesquite (Prosopis spp.). *International Journal of Phytoremediation*, **2004**, 6, 195-207	3.9	20
64	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	20
63	Effect of mercury and gold on growth, nutrient uptake, and anatomical changes in Chilopsis linearis. *Environmental and Experimental Botany*, **2009**, 65, 253-262	5.9	19
62	Lead toxicity in alfalfa plants exposed to phytohormones and ethylenediaminetetraacetic acid monitored by peroxidase, catalase, and amylase activities. *Environmental Toxicology and Chemistry*, **2007**, 26, 2717-23	3.8	19
61	Biochemical and physiological effects of copper compounds/nanoparticles on sugarcane (Saccharum officinarum). *Science of the Total Environment*, **2019**, 649, 554-562	10.2	19
60	Factors affecting fate and transport of engineered nanomaterials in terrestrial environments. *Current Opinion in Environmental Science and Health*, **2018**, 6, 47-53	8.1	18
59	Seedling emergence, growth, and leaf mineral nutrition of Ricinus communis L. cultivars irrigated with saline solution. *Industrial Crops and Products*, **2013**, 49, 75-80	5.9	18
58	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	10.3	17
57	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, 360-5	12.8	17
56	Use of chemical modification and spectroscopic techniques to determine the binding and coordination of gadolinium(III) and neodymium(III) ions by alfalfa biomass. *Talanta*, **2005**, 67, 34-45	6.2	17
55	Sorption of uranyl cations onto inactivated cells of alfalfa biomass investigated using chemical modification, ICP-OES, and XAS. *Environmental Science & Technology*, **2006**, 40, 4181-8	10.3	17
54	Lead adsorption by silica-immobilized humin under flow and batch conditions: assessment of flow rate and calcium and magnesium interference. *Journal of Hazardous Materials*, **2006**, 133, 79-84	12.8	17
53	Binding of erbium(III) and holmium(III) to native and chemically modified alfalfa biomass: a spectroscopic investigation. *Microchemical Journal*, **2004**, 76, 65-76	4.8	17

52	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	10.2	16
51	Coordination and speciation of cadmium in corn seedlings and its effects on macro- and micronutrients uptake. *Plant Physiology and Biochemistry*, **2009**, 47, 608-14	5.4	15
50	Accumulation, speciation, and coordination of arsenic in an inbred line and a wild type cultivar of the desert plant species Chilopsis linearis (Desert willow). *Phytochemistry*, **2009**, 70, 540-5	4	15
49	Use of synchrotron- and plasma-based spectroscopic techniques to determine the uptake and biotransformation of chromium(III) and chromium(VI) by Parkinsonia aculeata. *Metallomics*, **2009**, 1, 330-8	4.5	15
48	A spectrophotometric method to determine the siderophore production by strains of fluorescent Pseudomonas in the presence of copper and iron. *Microchemical Journal*, **2005**, 81, 35-40	4.8	15
47	Determination of equilibrium and kinetic parameters of the adsorption of Cr(III) and Cr(VI) from aqueous solutions to Agave Lechuguilla biomass. *Bioinorganic Chemistry and Applications*, **2005**, 3, 55-68	4.2	15
46	Differential physiological and biochemical impacts of nano vs micron Cu at two phenological growth stages in bell pepper (Capsicum annuum) plant. *NanoImpact*, **2019**, 14, 100161	5.6	14
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