Geraldine Sarret

List of Publications by Year
in descending order

67 papers	5,503 citations	87888 38 h-index	98798 67 g-index
67 all docs	67 docs citations	67 times ranked	5838 citing authors

#	Article	IF	Citations
1	Foliar Lead Uptake by Lettuce Exposed to Atmospheric Fallouts. Environmental Science & Technology, 2010, 44, 1036-1042.	10.0	342
2	Foliar exposure of the crop Lactuca sativa to silver nanoparticles: Evidence for internalization and changes in Ag speciation. Journal of Hazardous Materials, 2014, 264, 98-106.	12.4	335
3	Direct Determination of Lead Speciation in Contaminated Soils by EXAFS Spectroscopy. Environmental Science & Technology, 1996, 30, 1540-1552.	10.0	318
4	Forms of Zinc Accumulated in the HyperaccumulatorArabidopsis halleri Â. Plant Physiology, 2002, 130, 1815-1826.	4.8	302
5	Fate of pristine TiO2 nanoparticles and aged paint-containing TiO2 nanoparticles in lettuce crop after foliar exposure. Journal of Hazardous Materials, 2014, 273, 17-26.	12.4	199
6	Zinc Sorption to Three Gram-Negative Bacteria:â€‰ Combined Titration, Modeling, and EXAFS Study. Environmental Science & Technology, 2006, 40, 1806-1813.	10.0	195
7	Accumulation Forms of Zn and Pb inPhaseolus vulgarisin the Presence and Absence of EDTA. Environmental Science & Technology, 2001, 35, 2854-2859.	10.0	185
8	Structural Determination of Zn and Pb Binding Sites inPenicillium chrysogenumCell Walls by EXAFS Spectroscopy. Environmental Science & Technology, 1998, 32, 1648-1655.	10.0	176
9	Mechanisms of Lichen Resistance to Metallic Pollution. Environmental Science & Technology, 1998, 32, 3325-3330.	10.0	173
10	Localization and chemical forms of cadmium in plant samples by combining analytical electron microscopy and X-ray spectromicroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 1242-1252.	2.9	168
11	Quantitative Zn speciation in a contaminated dredged sediment by Î¼-PIXE, Î¼-SXRF, EXAFS spectroscopy and principal component analysis. Geochimica Et Cosmochimica Acta, 2002, 66, 1549-1567.	3.9	154
12	Fate of Ag-NPs in Sewage Sludge after Application on Agricultural Soils. Environmental Science & Technology, 2016, 50, 1759-1768.	10.0	151
13	Practical review on the use of synchrotron based micro- and nano- X-ray fluorescence mapping and X-ray absorption spectroscopy to investigate the interactions between plants and engineered nanomaterials. Plant Physiology and Biochemistry, 2017, 110, 13-32.	5.8	140
14	Trichomes of Tobacco Excrete Zinc as Zinc-Substituted Calcium Carbonate and Other Zinc-Containing Compounds. Plant Physiology, 2006, 141, 1021-1034.	4.8	129
15	The effect of phytostabilization on Zn speciation in a dredged contaminated sediment using scanning electron microscopy, X-ray fluorescence, EXAFS spectroscopy, and principal components analysis. Geochimica Et Cosmochimica Acta, 2005, 69, 2265-2284.	3.9	121
16	Zinc distribution and speciation in Arabidopsis halleriâ€ƒÃ—â€ƒArabidopsis lyrata progenies presenting various zinc accumulation capacities. New Phytologist, 2009, 184, 581-595.	7.3	114
17	Chemical forms of sulfur in geological and archeological asphaltenes from Middle East, France, and Spain determined by sulfur K- and L-edge X-ray absorption near-edge structure spectroscopy. Geochimica Et Cosmochimica Acta, 1999, 63, 3767-3779.	3.9	113
18	Mobilization of Selenite by Ralstonia metallidurans CH34. Applied and Environmental Microbiology, 2001, 67, 769-773.	3.1	108

#	Article	IF	Citations
19	Cd speciation and localization in the hyperaccumulator Arabidopsis halleri. Environmental and Experimental Botany, 2012, 82, 54-65.	4.2	106
20	Sampling, defining, characterising and modeling the rhizosphereâ€"the soil science tool box. Plant and Soil, 2009, 321, 457-482.	3.7	101
21	A Critical Review on the Impacts of Nanoplastics and Microplastics on Aquatic and Terrestrial Photosynthetic Organisms. Small, 2021, 17, e2005834.	10.0	99
22	Chemical Forms of Selenium in the Metal-Resistant Bacterium Ralstonia metallidurans CH34 Exposed to Selenite andSelenate. Applied and Environmental Microbiology, 2005, 71, 2331-2337.	3.1	96
23	Foliar or root exposures to smelter particles: Consequences for lead compartmentalization and speciation in plant leaves. Science of the Total Environment, 2014, 476-477, 667-676.	8.0	93
24	Silver Nanoparticles and Wheat Roots: A Complex Interplay. Environmental Science & Technology, 2017, 51, 5774-5782.	10.0	93
25	Zn Speciation in the Organic Horizon of a Contaminated Soil by Micro-X-ray Fluorescence, Micro- and Powder-EXAFS Spectroscopy, and Isotopic Dilution. Environmental Science & Technology, 2004, 38, 2792-2801.	10.0	92
26	Evidence of various mechanisms of Cd sequestration in the hyperaccumulator Arabidopsis halleri, the non-accumulator Arabidopsis lyrata, and their progenies by combined synchrotron-based techniques. Journal of Experimental Botany, 2015, 66, 3201-3214.	4.8	86
27	Lung distribution, quantification, co-localization and speciation of silver nanoparticles after lung exposure in mice. Toxicology Letters, 2015, 238, 1-6.	0.8	69
28	Transformation of Silver Nanoparticles in Sewage Sludge during Incineration. Environmental Science & Technology, 2016, 50, 3503-3510.	10.0	66
29	Interactions of arsenic with calcite surfaces revealed by in situ nanoscale imaging. Geochimica Et Cosmochimica Acta, 2015, 159, 61-79.	3.9	60
30	Lichen and soil as indicators of an atmospheric mercury contamination in the vicinity of a chlor-alkali plant (Grenoble, France). Ecological Indicators, 2012, 13, 178-183.	6.3	59
31	Fate and chemical speciation of antimony (Sb) during uptake, translocation and storage by rye grass using XANES spectroscopy. Environmental Pollution, 2017, 231, 1322-1329.	7.5	54
32	Atmospheric mercury incorporation in soils of an area impacted by a chlor-alkali plant (Grenoble,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	8.0	52
33	Cadmium transfer in contaminated soil-rice systems: Insights from solid-state speciation analysis and stable isotope fractionation. Environmental Pollution, 2021, 269, 115934.	7.5	52
34	Zinc distribution and speciation in roots of various genotypes of tobacco exposed to Zn. Environmental and Experimental Botany, 2008, 63, 80-90.	4.2	51
35	Zinc speciation in mining and smelter contaminated overbank sediments by EXAFS spectroscopy. Geochimica Et Cosmochimica Acta, 2010, 74, 3707-3720.	3.9	51
36	Dynamics of Zn in an urban wetland soilâ€"plant system: Coupling isotopic and EXAFS approaches. Geochimica Et Cosmochimica Acta, 2015, 160, 55-69.	3.9	47

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37	Calcium promotes cadmium elimination as vaterite grains by tobacco trichomes. Geochimica Et Cosmochimica Acta, 2010, 74, 5817-5834.	3.9	43
38	Innovative combination of spectroscopic techniques to reveal nanoparticle fate in a crop plant. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 119, 17-24.	2.9	43
39	Mitigating the level of cadmium in cacao products: Reviewing the transfer of cadmium from soil to chocolate bar. Science of the Total Environment, 2021, 781, 146779.	8.0	43
40	Assessing the impacts of sewage sludge amendment containing nano-TiO2 on tomato plants: A life cycle study. Journal of Hazardous Materials, 2019, 369, 191-198.	12.4	41
41	Sulfur speciation in kerogens of the Orbagnoux deposit (Upper Kimmeridgian, Jura) by XANES spectroscopy and pyrolysis. Organic Geochemistry, 2002, 33, 877-895.	1.8	39
42	Phytoavailability of lead altered by two Pelargonium cultivars grown on contrasting lead-spiked soils. Journal of Soils and Sediments, 2016, 16, 581-591.	3.0	38
43	In Situ Formation of Silver Nanoparticles (Ag-NPs) onto Textile Fibers. ACS Omega, 2021, 6, 1316-1327.	3.5	37
44	Mercury speciation in Pinus nigra barks from Monte Amiata (Italy): An X-ray absorption spectroscopy study. Environmental Pollution, 2017, 227, 83-88.	7.5	34
45	Searching for relevant criteria to distinguish natural vs. anthropogenic TiO₂ nanoparticles in soils. Environmental Science: Nano, 2018, 5, 2853-2863.	4.3	30
46	Biochemical and Biophysical Characterization of the Selenium-binding and Reducing Site in Arabidopsis thaliana Homologue to Mammals Selenium-binding Protein 1. Journal of Biological Chemistry, 2014, 289, 31765-31776.	3.4	29
47	Physicochemical alterations and toxicity of InP alloyed quantum dots aged in environmental conditions: A safer by design evaluation. NanoImpact, 2019, 14, 100168.	4.5	29
48	Theoretical isotope fractionation of cadmium during complexation with organic ligands. Chemical Geology, 2021, 571, 120178.	3.3	28
49	Chemical forms of calcium in Ca,Zn- and Ca,Cd-containing grains excreted by tobacco trichomes. Canadian Journal of Chemistry, 2007, 85, 738-746.	1.1	27
50	Algal Bloom Exacerbates Hydrogen Sulfide and Methylmercury Contamination in the Emblematic High-Altitude Lake Titicaca. Geosciences (Switzerland), 2018, 8, 438.	2.2	27
51	CopK from Cupriavidus metallidurans CH34 Binds Cu(I) in a Tetrathioether Site: Characterization by X-ray Absorption and NMR Spectroscopy. Journal of the American Chemical Society, 2010, 132, 3770-3777.	13.7	26
52	Zn Speciation and Stable Isotope Fractionation in a Contaminated Urban Wetland Soilâ€“Typha latifolia System. Environmental Science & Technology, 2017, 51, 8350-8358.	10.0	26
53	Changes of Cadmium Storage Forms and Isotope Ratios in Rice During Grain Filling. Frontiers in Plant Science, 2021, 12, 645150.	3.6	22
54	Metal sensing and signal transduction by CnrX from Cupriavidus metallidurans CH34: role of the only methionine assessed by a functional, spectroscopic, and theoretical study. Metallomics, 2014, 6, 263-273.	2.4	21

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55	Impact of a Model Soil Microorganism and of Its Secretome on the Fate of Silver Nanoparticles. Environmental Science & Technology, 2018, 52, 71-78.	10.0	21
56	Assessing implications of nanoplastics exposure to plants with advanced nanometrology techniques. Journal of Hazardous Materials, 2022, 430, 128356.	12.4	20
57	Distinguishing Engineered TiO₂ Nanomaterials from Natural Ti Nanomaterials in Soil Using spICP-TOFMS and Machine Learning. Environmental Science & Technology, 2022, 56, 2990-3001.	10.0	19
58	Fate of cadmium in the rhizosphere of Arabidopsis halleri grown in a contaminated dredged sediment. Science of the Total Environment, 2015, 536, 468-480.	8.0	16
59	Is Tillandsia capillaris an efficient bioindicator of atmospheric metal and metalloid deposition? Insights from five months of monitoring in an urban mining area. Ecological Indicators, 2016, 67, 227-237.	6.3	16
60	Lead Highly Available in Soils Centuries after Metallurgical Activities. Journal of Environmental Quality, 2017, 46, 1236-1242.	2.0	14
61	Extreme Arsenic Bioaccumulation Factor Variability in Lake Titicaca, Bolivia. Scientific Reports, 2019, 9, 10626.	3.3	14
62	Evidence for Conformational Changes upon Copper Binding to <i>Cupriavidus metallidurans</i> CzcE. Biochemistry, 2010, 49, 1913-1922.	2.5	13
63	Xanthan Exopolysaccharide: Cu²⁺ Complexes Affected from the pH-Dependent Conformational State; Implications for Environmentally Relevant Biopolymers. Environmental Science & Technology, 2016, 50, 3477-3485.	10.0	12
64	Spectroscopic Characterization of the Metal-Binding Sites in the Periplasmic Metal-Sensor Domain of CnrX from <i>Cupriavidus metallidurans</i> CH34. Biochemistry, 2011, 50, 9036-9045.	2.5	10
65	The poly-gamma-glutamate of Bacillus subtilis interacts specifically with silver nanoparticles. PLoS ONE, 2018, 13, e0197501.	2.5	8
66	Enhanced Selenate Accumulation in <i>Cupriavidus metallidurans</i> CH34 Does Not Trigger a Detoxification Pathway. Applied and Environmental Microbiology, 2009, 75, 2250-2252.	3.1	5
67	Comment on â€œSpeciation and fate of toxic cadmium in contaminated paddy soils and rice using XANES/EXAFS spectroscopyâ€• Journal of Hazardous Materials, 2021, 401, 123240.	12.4	2