Emmanuel Doelsch

List of Publications by Year in Descending Order

62 papers	1,634 citations	26 h-index	38 g-index
65 ext. papers	1,847 ext. citations	6.9 avg, IF	4.31 L-index

#	Paper	IF	Citations
62	Contrasted fate of zinc sulfide nanoparticles in soil revealed by a combination of X-ray absorption spectroscopy, diffusive gradient in thin films and isotope tracing. *Environmental Pollution*, **2022**, 292, 118414	9.3	0
61	Relative Weight of Organic Waste Origin on Compost and Digestate 16S rRNA Gene Bacterial Profilings and Related Functional Inferences. *Frontiers in Microbiology*, **2021**, 12, 667043	5.7	3
60	X-ray absorption spectroscopy evidence of sulfur-bound cadmium in the Cd-hyperaccumulator Solanum nigrum and the non-accumulator Solanum melongena. *Environmental Pollution*, **2021**, 279, 116897	8.3	0
59	Redistribution of Zn towards light-density fractions and potentially mobile phases in a long-term manure-amended clayey soil. *Geoderma*, **2021**, 394, 115044	6.7	1
58	How Microbial Biofilms Control the Environmental Fate of Engineered Nanoparticles?. *Frontiers in Environmental Science*, **2020**, 8,	4.8	11
57	Zinc Speciation in Organic Waste Drives Its Fate in Amended Soils. *Environmental Science & Technology*, **2020**, 54, 12034-12041	10.3	6
56	The impact of fermentation on the distribution of cadmium in cacao beans. *Food Research International*, **2020**, 127, 108743	7	11
55	Phytoavailability of silver at predicted environmental concentrations: does the initial ionic or nanoparticulate form matter?. *Environmental Science: Nano*, **2019**, 6, 127-135	7.1	4
54	Soil organo-mineral associations formed by co-precipitation of Fe, Si and Al in presence of organic ligands. *Geochimica Et Cosmochimica Acta*, **2019**, 260, 15-28	5.5	29
53	, and Spectroscopic Assessment of Lead Exposure Reduction via Ingestion and Inhalation Pathways Using Phosphate and Iron Amendments. *Environmental Science & Technology*, **2019**, 53, 10329-10341	10.3	15
52	Lead, zinc, and copper redistributions in soils along a deposition gradient from emissions of a Pb-Ag smelter decommissioned 100 years ago. *Science of the Total Environment*, **2019**, 665, 502-512	10.2	27
51	Composition and molecular scale structure of nanophases formed by precipitation of biotite weathering products. *Geochimica Et Cosmochimica Acta*, **2018**, 229, 53-64	5.5	10
50	Drastic Change in Zinc Speciation during Anaerobic Digestion and Composting: Instability of Nanosized Zinc Sulfide. *Environmental Science & Technology*, **2018**, 52, 12987-12996	10.3	19
49	Does specific parameterization of WHAM improve the prediction of copper competitive binding and toxicity on plant roots?. *Chemosphere*, **2017**, 170, 225-232	8.4	1
48	Radical change of Zn speciation in pig slurry amended soil: Key role of nano-sized sulfide particles. *Environmental Pollution*, **2017**, 222, 495-503	9.3	12
47	Application of Synchrotron Radiation-based Methods for Environmental Biogeochemistry: Introduction to the Special Section. *Journal of Environmental Quality*, **2017**, 46, 1139-1145	3.4	11
46	Anaerobic Digestion Alters Copper and Zinc Speciation. *Environmental Science & Technology*, **2017**, 51, 10326-10334	10.3	22

45	Evidence that Soil Properties and Organic Coating Drive the Phytoavailability of Cerium Oxide Nanoparticles. *Environmental Science & Technology*, **2017**, 51, 9756-9764	10.3	35
44	Parameterizing the binding properties of dissolved organic matter with default values skews the prediction of copper solution speciation and ecotoxicity in soil. *Environmental Toxicology and Chemistry*, **2017**, 36, 898-905	3.8	10
43	Increased zinc and copper availability in organic waste amended soil potentially involving distinct release mechanisms. *Environmental Pollution*, **2016**, 212, 299-306	9.3	40
42	Involvement of nitrogen functional groups in high-affinity copper binding in tomato and wheat root apoplasts: spectroscopic and thermodynamic evidence. *Metallomics*, **2016**, 8, 366-76	4.5	8
41	Diagnostic de contamination des agrosystèmes périurbains de Dakar par les éléments traces métalliques. *Biotechnology, Agronomy and Society and Environment*, **2016**, 397-407	1.3	3
40	Direct uptake of organically derived carbon by grass roots and allocation in leaves and phytoliths: 13C labeling evidence. *Biogeosciences*, **2016**, 13, 1693-1703	4.6	24
39	Copper and zinc accumulation and fractionation in a clayey Hapludox soil subject to long-term pig slurry application. *Science of the Total Environment*, **2015**, 536, 831-839	10.2	29
38	Ex-ante fate assessment of trace organic contaminants for decision making: a post-normal estimation for sludge recycling in Reunion. *Journal of Environmental Management*, **2015**, 147, 140-51	7.9	5
37	Repeated pig manure applications modify nitrate and chloride competition and fluxes in a Nitisol. *Science of the Total Environment*, **2015**, 511, 238-48	10.2	11
36	Effect of dissolved organic matter composition on metal speciation in soil solutions. *Chemical Geology*, **2015**, 398, 61-69	4.2	85
35	Evidence of sulfur-bound reduced copper in bamboo exposed to high silicon and copper concentrations. *Environmental Pollution*, **2014**, 187, 22-30	9.3	65
34	Isolated cell walls exhibit cation binding properties distinct from those of plant roots. *Plant and Soil* , **2014**, 381, 367-379	4.2	22
33	INVESTIGATION OF TRACE ELEMENTS CONTENT IN ORGANIC WASTES USED FOR MARKET GARDENING. *Acta Horticulturae*, **2014**, 275-284	0.3	
32	Zinc fate in animal husbandry systems. *Metallomics*, **2014**, 6, 1999-2009	4.5	15
31	Returning Organic Residues to Agricultural Land (RORAL) Fuelling the Follow-the-Technology approach. *Agricultural Systems*, **2014**, 124, 60-69	6.1	13
30	Effects of silicon and copper on bamboo grown hydroponically. *Environmental Science and Pollution Research*, **2013**, 20, 6482-95	5.1	17
29	Fate and behaviour of Cu and Zn from pig slurry spreading in a tropical water–soil–plant system. *Agriculture, Ecosystems and Environment*, **2013**, 164, 70-79	5.7	36
28	Investigation of potentially toxic heavy metals in different organic wastes used to fertilize market garden crops. *Waste Management*, **2013**, 33, 184-92	8.6	22

27	Distribution and variability of silicon, copper and zinc in different bamboo species. *Plant and Soil*, **2012**, 351, 377-387	4.2	29
26	Structure and distribution of allophanes, imogolite and proto-imogolite in volcanic soils. *Geoderma*, **2012**, 183-184, 100-108	6.7	65
25	High energy resolution five-crystal spectrometer for high quality fluorescence and absorption measurements on an x-ray absorption spectroscopy beamline. *Review of Scientific Instruments*, **2012** , 83, 063104	1.7	44
24	Synthesis of Ge-imogolite: influence of the hydrolysis ratio on the structure of the nanotubes. *Physical Chemistry Chemical Physics*, **2011**, 13, 14516-22	3.6	28
23	Combining size fractionation, scanning electron microscopy, and X-ray absorption spectroscopy to probe zinc speciation in pig slurry. *Journal of Environmental Quality*, **2010**, 39, 531-40	3.4	24
22	Fifth Annual SOLEIL UsersSMeeting. *Synchrotron Radiation News*, **2010**, 23, 18-20	0.6	
21	Formation and Growth Mechanisms of Imogolite-Like Aluminogermanate Nanotubes. *Chemistry of Materials*, **2010**, 22, 2466-2473	9.6	53
20	Investigation of copper speciation in pig slurry by a multitechnique approach. *Environmental Science & Technology*, **2010**, 44, 6926-32	10.3	44
19	Evidence of double-walled Al-Ge imogolite-like nanotubes. a cryo-TEM and SAXS investigation. *Journal of the American Chemical Society*, **2010**, 132, 1208-9	16.4	54
18	Impact of pig slurry and green waste compost application on heavy metal exchangeable fractions in tropical soils. *Geoderma*, **2010**, 155, 390-400	6.7	31
17	Impact of high natural soilborne heavy metal concentrations on the mobility and phytoavailability of these elements for sugarcane. *Geoderma*, **2010**, 159, 452-458	6.7	10
16	Spectroscopic characterization of organic matter of a soil and vinasse mixture during aerobic or anaerobic incubation. *Waste Management*, **2009**, 29, 1929-35	8.6	30
15	Synthesis of imogolite fibers from decimolar concentration at low temperature and ambient pressure: a promising route for inexpensive nanotubes. *Journal of the American Chemical Society*, **2009**, 131, 17080-1	16.4	57
14	Role of natural nanoparticles on the speciation of Ni in andosols of la Reunion. *Geochimica Et Cosmochimica Acta*, **2009**, 73, 4750-4760	5.5	26
13	Fractionation of tropical soilborne heavy metals□comparison of two sequential extraction procedures. *Geoderma*, **2008**, 143, 168-179	6.7	51
12	Synthesis of large quantities of single-walled aluminogermanate nanotube. *Journal of the American Chemical Society*, **2008**, 130, 5862-3	16.4	65
11	New combination of EXAFS spectroscopy and density fractionation for the speciation of chromium within an andosol. *Environmental Science & Technology*, **2006**, 40, 7602-8	10.3	38
10	Impact of sewage sludge spreading on heavy metal speciation in tropical soils (R□nion, Indian Ocean). *Chemosphere*, **2006**, 65, 286-93	8.4	38

9	Heavy metal content in soils of R□nion (Indian Ocean). *Geoderma*, **2006**, 134, 119-134	6.7	50
8	Sources of very high heavy metal content in soils of volcanic island (La R□nion). *Journal of Geochemical Exploration*, **2006**, 88, 194-197	3.8	24
7	Chemistry and structure of colloids obtained by hydrolysis of Fe(III) in the presence of SiO4 ligands. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2003**, 217, 121-128	5.1	62
6	Hydrolysis of Iron(II) Chloride under Anoxic Conditions and Influence of SiO4Ligands. *Langmuir*, **2002**, 18, 4292-4299	4	17
5	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO4 Ligands. 3. Semilocal Scale Structure of the Aggregates. *Langmuir*, **2001**, 17, 4753-4757	4	17
4	Speciation and Crystal Chemistry of Fe(III) Chloride Hydrolyzed in the Presence of SiO4 Ligands. 2. Characterization of Si□e Aggregates by FTIR and 29Si Solid-State NMR. *Langmuir*, **2001**, 17, 1399-1405	4	68
3	Crystal Chemistry of Colloids Obtained by Hydrolysis of Fe(III) in the Presence of SiO4 Ligands. *Materials Research Society Symposia Proceedings*, **2000**, 658, 3361		
2	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO4 Ligands. 1. An Fe K-Edge EXAFS Study. *Langmuir*, **2000**, 16, 4726-4731	4	85
1	Direct uptake of organic carbon by grass roots and allocation in leaves and phytoliths: ¹³C labeling evidence		1