

# Emmanuel Doelsch

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

2,093  
citations

172457

29  
h-index

243625

44  
g-index

65  
all docs

65  
docs citations

65  
times ranked

2453  
citing authors

#	ARTICLE	IF	CITATIONS
1	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. <i>Environmental Pollution</i> , 2022, 292, 118414.	7.5	4
2	Trace contaminants in the environmental assessment of organic waste recycling in agriculture: Gaps between methods and knowledge. <i>Advances in Agronomy</i> , 2022, , 53-188.	5.2	8
3	Organic waste-borne ZnS nanoparticles: The forgotten ones. <i>Environmental Pollution</i> , 2022, 308, 119629.	7.5	3
4	Relative Weight of Organic Waste Origin on Compost and Digestate 16S rRNA Gene Bacterial Profilings and Related Functional Inferences. <i>Frontiers in Microbiology</i> , 2021, 12, 667043.	3.5	8
5	X-ray absorption spectroscopy evidence of sulfur-bound cadmium in the Cd-hyperaccumulator <i>Solanum nigrum</i> and the non-accumulator <i>Solanum melongena</i> . <i>Environmental Pollution</i> , 2021, 279, 116897.	7.5	13
6	Redistribution of Zn towards light-density fractions and potentially mobile phases in a long-term manure-amended clayey soil. <i>Geoderma</i> , 2021, 394, 115044.	5.1	3
7	The impact of fermentation on the distribution of cadmium in cacao beans. <i>Food Research International</i> , 2020, 127, 108743.	6.2	23
8	Zinc Speciation in Organic Waste Drives Its Fate in Amended Soils. <i>Environmental Science &amp; Technology</i> , 2020, 54, 12034-12041.	10.0	12
9	How Microbial Biofilms Control the Environmental Fate of Engineered Nanoparticles?. <i>Frontiers in Environmental Science</i> , 2020, 8, .	3.3	18
10	<i>In Vitro</i> , <i>In Vivo</i> , and Spectroscopic Assessment of Lead Exposure Reduction via Ingestion and Inhalation Pathways Using Phosphate and Iron Amendments. <i>Environmental Science &amp; Technology</i> , 2019, 53, 10329-10341.	10.0	38
11	Phytoavailability of silver at predicted environmental concentrations: does the initial ionic or nanoparticulate form matter?. <i>Environmental Science: Nano</i> , 2019, 6, 127-135.	4.3	5
12	Soil organo-mineral associations formed by co-precipitation of Fe, Si and Al in presence of organic ligands. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 260, 15-28.	3.9	51
13	Lead, zinc, and copper redistributions in soils along a deposition gradient from emissions of a Pb-Ag smelter decommissioned 100 years ago. <i>Science of the Total Environment</i> , 2019, 665, 502-512.	8.0	50
14	Composition and molecular scale structure of nanophases formed by precipitation of biotite weathering products. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 229, 53-64.	3.9	15
15	Drastic Change in Zinc Speciation during Anaerobic Digestion and Composting: Instability of Nanosized Zinc Sulfide. <i>Environmental Science &amp; Technology</i> , 2018, 52, 12987-12996.	10.0	28
16	Does specific parameterization of WHAM improve the prediction of copper competitive binding and toxicity on plant roots?. <i>Chemosphere</i> , 2017, 170, 225-232.	8.2	4
17	Radical change of Zn speciation in pig slurry amended soil: Key role of nano-sized sulfide particles. <i>Environmental Pollution</i> , 2017, 222, 495-503.	7.5	21
18	Anaerobic Digestion Alters Copper and Zinc Speciation. <i>Environmental Science &amp; Technology</i> , 2017, 51, 10326-10334.	10.0	35

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19	Evidence that Soil Properties and Organic Coating Drive the Phytoavailability of Cerium Oxide Nanoparticles. <i>Environmental Science &amp; Technology</i> , 2017, 51, 9756-9764.	10.0	49
20	Parameterizing the binding properties of dissolved organic matter with default values skews the prediction of copper solution speciation and ecotoxicity in soil. <i>Environmental Toxicology and Chemistry</i> , 2017, 36, 898-905.	4.3	16
21	Application of Synchrotron Radiation-based Methods for Environmental Biogeochemistry: Introduction to the Special Section. <i>Journal of Environmental Quality</i> , 2017, 46, 1139-1145.	2.0	15
22	Direct uptake of organically derived carbon by grass roots and allocation in leaves and phytoliths: <sup>13</sup> C labeling evidence. <i>Biogeosciences</i> , 2016, 13, 1693-1703.	3.3	28
23	Increased zinc and copper availability in organic waste amended soil potentially involving distinct release mechanisms. <i>Environmental Pollution</i> , 2016, 212, 299-306.	7.5	54
24	Involvement of nitrogen functional groups in high-affinity copper binding in tomato and wheat root apoplasts: spectroscopic and thermodynamic evidence. <i>Metallomics</i> , 2016, 8, 366-376.	2.4	8
25	Repeated pig manure applications modify nitrate and chloride competition and fluxes in a Nitisol. <i>Science of the Total Environment</i> , 2015, 511, 238-248.	8.0	11
26	Effect of dissolved organic matter composition on metal speciation in soil solutions. <i>Chemical Geology</i> , 2015, 398, 61-69.	3.3	102
27	Copper and zinc accumulation and fractionation in a clayey Hapludox soil subject to long-term pig slurry application. <i>Science of the Total Environment</i> , 2015, 536, 831-839.	8.0	43
28	Ex-ante fate assessment of trace organic contaminants for decision making: A post-normal estimation for sludge recycling in Reunion. <i>Journal of Environmental Management</i> , 2015, 147, 140-151.	7.8	6
29	INVESTIGATION OF TRACE ELEMENTS CONTENT IN ORGANIC WASTES USED FOR MARKET GARDENING. <i>Acta Horticulturae</i> , 2014, , 275-284.	0.2	0
30	Zinc fate in animal husbandry systems. <i>Metallomics</i> , 2014, 6, 1999-2009.	2.4	20
31	Returning Organic Residues to Agricultural Land (RORAL) – Fuelling the Follow-the-Technology approach. <i>Agricultural Systems</i> , 2014, 124, 60-69.	6.1	21
32	Evidence of sulfur-bound reduced copper in bamboo exposed to high silicon and copper concentrations. <i>Environmental Pollution</i> , 2014, 187, 22-30.	7.5	78
33	Isolated cell walls exhibit cation binding properties distinct from those of plant roots. <i>Plant and Soil</i> , 2014, 381, 367-379.	3.7	24
34	Effects of silicon and copper on bamboo grown hydroponically. <i>Environmental Science and Pollution Research</i> , 2013, 20, 6482-6495.	5.3	21
35	Fate and behaviour of Cu and Zn from pig slurry spreading in a tropical water-soil-plant system. <i>Agriculture, Ecosystems and Environment</i> , 2013, 164, 70-79.	5.3	44
36	Investigation of potentially toxic heavy metals in different organic wastes used to fertilize market garden crops. <i>Waste Management</i> , 2013, 33, 184-192.	7.4	36

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37	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.	1.3	55
38	Structure and distribution of allophanes, imogolite and proto-imogolite in volcanic soils. Geoderma, 2012, 183-184, 100-108.	5.1	83
39	Distribution and variability of silicon, copper and zinc in different bamboo species. Plant and Soil, 2012, 351, 377-387.	3.7	36
40	Synthesis of Ge-imogolite: influence of the hydrolysis ratio on the structure of the nanotubes. Physical Chemistry Chemical Physics, 2011, 13, 14516.	2.8	29
41	Combining Size Fractionation, Scanning Electron Microscopy, and X-ray Absorption Spectroscopy to Probe Zinc Speciation in Pig Slurry. Journal of Environmental Quality, 2010, 39, 531-540.	2.0	27
42	Fifth Annual SOLEIL Users' Meeting. Synchrotron Radiation News, 2010, 23, 18-20.	0.8	0
43	Formation and Growth Mechanisms of Imogolite-Like Aluminogermanate Nanotubes. Chemistry of Materials, 2010, 22, 2466-2473.	6.7	60
44	Investigation of Copper Speciation in Pig Slurry by a Multitechnique Approach. Environmental Science & Technology, 2010, 44, 6926-6932.	10.0	50
45	Evidence of Double-Walled Al <sup>3+</sup> Ge Imogolite-Like Nanotubes. A Cryo-TEM and SAXS Investigation. Journal of the American Chemical Society, 2010, 132, 1208-1209.	13.7	56
46	Impact of pig slurry and green waste compost application on heavy metal exchangeable fractions in tropical soils. Geoderma, 2010, 155, 390-400.	5.1	34
47	Impact of high natural soilborne heavy metal concentrations on the mobility and phytoavailability of these elements for sugarcane. Geoderma, 2010, 159, 452-458.	5.1	10
48	Spectroscopic characterization of organic matter of a soil and vinasse mixture during aerobic or anaerobic incubation. Waste Management, 2009, 29, 1929-1935.	7.4	39
49	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, 17080-17081.	13.7	58
50	Role of natural nanoparticles on the speciation of Ni in andosols of la Reunion. Geochimica Et Cosmochimica Acta, 2009, 73, 4750-4760.	3.9	28
51	Fractionation of tropical soilborne heavy metals—Comparison of two sequential extraction procedures. Geoderma, 2008, 143, 168-179.	5.1	61
52	Synthesis of Large Quantities of Single-Walled Aluminogermanate Nanotube. Journal of the American Chemical Society, 2008, 130, 5862-5863.	13.7	72
53	New Combination of EXAFS Spectroscopy and Density Fractionation for the Speciation of Chromium within an Andosol. Environmental Science & Technology, 2006, 40, 7602-7608.	10.0	47
54	Impact of sewage sludge spreading on heavy metal speciation in tropical soils (Réunion, Indian Ocean). Chemosphere, 2006, 65, 286-293.	8.2	41

#	ARTICLE	IF	CITATIONS
55	Heavy metal content in soils of Réunion (Indian Ocean). <i>Geoderma</i> , 2006, 134, 119-134.	5.1	64
56	Sources of very high heavy metal content in soils of volcanic island (La Réunion). <i>Journal of Geochemical Exploration</i> , 2006, 88, 194-197.	3.2	32
57	Chemistry and structure of colloids obtained by hydrolysis of Fe(III) in the presence of SiO <sub>4</sub> ligands. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2003, 217, 121-128.	4.7	78
58	Hydrolysis of Iron(II) Chloride under Anoxic Conditions and Influence of SiO <sub>4</sub> Ligands. <i>Langmuir</i> , 2002, 18, 4292-4299.	3.5	19
59	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO <sub>4</sub> Ligands. 3. Semilocal Scale Structure of the Aggregates. <i>Langmuir</i> , 2001, 17, 4753-4757.	3.5	21
60	Speciation and Crystal Chemistry of Fe(III) Chloride Hydrolyzed in the Presence of SiO <sub>4</sub> Ligands. 2. Characterization of Si <sup>IV</sup> -Fe Aggregates by FTIR and <sup>29</sup> Si Solid-State NMR. <i>Langmuir</i> , 2001, 17, 1399-1405.	3.5	77
61	Crystal Chemistry of Colloids Obtained by Hydrolysis of Fe(III) in the Presence of SiO <sub>4</sub> Ligands. <i>Materials Research Society Symposia Proceedings</i> , 2000, 658, 3361.	0.1	1
62	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO <sub>4</sub> Ligands. 1. An Fe K-Edge EXAFS Study. <i>Langmuir</i> , 2000, 16, 4726-4731.	3.5	93