Emmanuel Doelsch

List of Publications by Year
in descending order

62	2,093	172207	243296
papers	citations	29 h-index	44 g-index

65	65	65	2453
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of dissolved organic matter composition on metal speciation in soil solutions. Chemical Geology, 2015, 398, 61-69.	1.4	102
2	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO4Ligands. 1. An Fe K-Edge EXAFS Study. Langmuir, 2000, 16, 4726-4731.	1.6	93
3	Structure and distribution of allophanes, imogolite and proto-imogolite in volcanic soils. Geoderma, 2012, 183-184, 100-108.	2.3	83
4	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.	2.3	78
5	Evidence of sulfur-bound reduced copper in bamboo exposed to high silicon and copper concentrations. Environmental Pollution, 2014, 187, 22-30.	3.7	78
6	Speciation and Crystal Chemistry of Fe(III) Chloride Hydrolyzed in the Presence of SiO4 Ligands. 2. Characterization of Siâ˜Fe Aggregates by FTIR and 29Si Solid-State NMR. Langmuir, 2001, 17, 1399-1405.	1.6	77
7	Synthesis of Large Quantities of Single-Walled Aluminogermanate Nanotube. Journal of the American Chemical Society, 2008, 130, 5862-5863.	6.6	72
8	Heavy metal content in soils of RÃ©union (Indian Ocean). Geoderma, 2006, 134, 119-134.	2.3	64
9	Fractionation of tropical soilborne heavy metalsâ€”Comparison of two sequential extraction procedures. Geoderma, 2008, 143, 168-179.	2.3	61
10	Formation and Growth Mechanisms of Imogolite-Like Aluminogermanate Nanotubes. Chemistry of Materials, 2010, 22, 2466-2473.	3.2	60
11	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.	6.6	58
12	Evidence of Double-Walled Alâ˜Ge Imogolite-Like Nanotubes. A Cryo-TEM and SAXS Investigation. Journal of the American Chemical Society, 2010, 132, 1208-1209.	6.6	56
13	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.	0.6	55
14	Increased zinc and copper availability in organic waste amended soil potentially involving distinct release mechanisms. Environmental Pollution, 2016, 212, 299-306.	3.7	54
15	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.	1.6	51
16	Investigation of Copper Speciation in Pig Slurry by a Multitechnique Approach. Environmental Science & Technology, 2010, 44, 6926-6932.	4.6	50
17	Lead, zinc, and copper redistributions in soils along a deposition gradient from emissions of a Pb-Ag smelter decommissioned 100â€¯years ago. Science of the Total Environment, 2019, 665, 502-512.	3.9	50
18	Evidence that Soil Properties and Organic Coating Drive the Phytoavailability of Cerium Oxide Nanoparticles. Environmental Science & Technology, 2017, 51, 9756-9764.	4.6	49

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19	New Combination of EXAFS Spectroscopy and Density Fractionation for the Speciation of Chromium within an Andosol. Environmental Science & Technology, 2006, 40, 7602-7608.	4.6	47
20	Fate and behaviour of Cu and Zn from pig slurry spreading in a tropical waterâ€“soilâ€“plant system. Agriculture, Ecosystems and Environment, 2013, 164, 70-79.	2.5	44
21	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.	3.9	43
22	Impact of sewage sludge spreading on heavy metal speciation in tropical soils (RÃ©union, Indian Ocean). Chemosphere, 2006, 65, 286-293.	4.2	41
23	Spectroscopic characterization of organic matter of a soil and vinasse mixture during aerobic or anaerobic incubation. Waste Management, 2009, 29, 1929-1935.	3.7	39
24	In Vitro, in Vivo, and Spectroscopic Assessment of Lead Exposure Reduction via Ingestion and Inhalation Pathways Using Phosphate and Iron Amendments. Environmental Science & Technology, 2019, 53, 10329-10341.	4.6	38
25	Distribution and variability of silicon, copper and zinc in different bamboo species. Plant and Soil, 2012, 351, 377-387.	1.8	36
26	Investigation of potentially toxic heavy metals in different organic wastes used to fertilize market garden crops. Waste Management, 2013, 33, 184-192.	3.7	36
27	Anaerobic Digestion Alters Copper and Zinc Speciation. Environmental Science & Technology, 2017, 51, 10326-10334.	4.6	35
28	Impact of pig slurry and green waste compost application on heavy metal exchangeable fractions in tropical soils. Geoderma, 2010, 155, 390-400.	2.3	34
29	Sources of very high heavy metal content in soils of volcanic island (La RÃ©union). Journal of Geochemical Exploration, 2006, 88, 194-197.	1.5	32
30	Synthesis of Ge-imogolite: influence of the hydrolysis ratio on the structure of the nanotubes. Physical Chemistry Chemical Physics, 2011, 13, 14516.	1.3	29
31	Role of natural nanoparticles on the speciation of Ni in andosols of la Reunion. Geochimica Et Cosmochimica Acta, 2009, 73, 4750-4760.	1.6	28
32	Direct uptake of organically derived carbon by grass roots and allocation in leaves and phytoliths: ¹³C labeling evidence. Biogeosciences, 2016, 13, 1693-1703.	1.3	28
33	Drastic Change in Zinc Speciation during Anaerobic Digestion and Composting: Instability of Nanosized Zinc Sulfide. Environmental Science & Technology, 2018, 52, 12987-12996.	4.6	28
34	Combining Size Fractionation, Scanning Electron Microscopy, and Xâ€ray Absorption Spectroscopy to Probe Zinc Speciation in Pig Slurry. Journal of Environmental Quality, 2010, 39, 531-540.	1.0	27
35	Isolated cell walls exhibit cation binding properties distinct from those of plant roots. Plant and Soil, 2014, 381, 367-379.	1.8	24
36	The impact of fermentation on the distribution of cadmium in cacao beans. Food Research International, 2020, 127, 108743.	2.9	23

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37	Speciation and Crystal Chemistry of Iron(III) Chloride Hydrolyzed in the Presence of SiO4Ligands. 3. Semilocal Scale Structure of the Aggregates. Langmuir, 2001, 17, 4753-4757.	1.6	21
38	Effects of silicon and copper on bamboo grown hydroponically. Environmental Science and Pollution Research, 2013, 20, 6482-6495.	2.7	21
39	Returning Organic Residues to Agricultural Land (RORAL) â€“ Fuelling the Follow-the-Technology approach. Agricultural Systems, 2014, 124, 60-69.	3.2	21
40	Radical change of Zn speciation in pig slurry amended soil: Key role of nano-sized sulfide particles. Environmental Pollution, 2017, 222, 495-503.	3.7	21
41	Zinc fate in animal husbandry systems. Metallomics, 2014, 6, 1999-2009.	1.0	20
42	Hydrolysis of Iron(II) Chloride under Anoxic Conditions and Influence of SiO4Ligands. Langmuir, 2002, 18, 4292-4299.	1.6	19
43	How Microbial Biofilms Control the Environmental Fate of Engineered Nanoparticles?. Frontiers in Environmental Science, 2020, 8, .	1.5	18
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.	2.2	16
45	Application of Synchrotron Radiationâ€based Methods for Environmental Biogeochemistry: Introduction to the Special Section. Journal of Environmental Quality, 2017, 46, 1139-1145.	1.0	15
46	Composition and molecular scale structure of nanophases formed by precipitation of biotite weathering products. Geochimica Et Cosmochimica Acta, 2018, 229, 53-64.	1.6	15
47	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.	3.7	13
48	Zinc Speciation in Organic Waste Drives Its Fate in Amended Soils. Environmental Science & Technology, 2020, 54, 12034-12041.	4.6	12
49	Repeated pig manure applications modify nitrate and chloride competition and fluxes in a Nitisol. Science of the Total Environment, 2015, 511, 238-248.	3.9	11
50	Impact of high natural soilborne heavy metal concentrations on the mobility and phytoavailability of these elements for sugarcane. Geoderma, 2010, 159, 452-458.	2.3	10
51	Involvement of nitrogen functional groups in high-affinity copper binding in tomato and wheat root apoplasts: spectroscopic and thermodynamic evidence. Metallomics, 2016, 8, 366-376.	1.0	8
52	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.	1.5	8
53	Trace contaminants in the environmental assessment of organic waste recycling in agriculture: Gaps between methods and knowledge. Advances in Agronomy, 2022, , 53-188.	2.4	8
54	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, 140-151.	3.8	6

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55	Phytoavailability of silver at predicted environmental concentrations: does the initial ionic or nanoparticulate form matter?. Environmental Science: Nano, 2019, 6, 127-135.	2.2	5
56	Does specific parameterization of WHAM improve the prediction of copper competitive binding and toxicity on plant roots?. Chemosphere, 2017, 170, 225-232.	4.2	4
57	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.	3.7	4
58	Redistribution of Zn towards light-density fractions and potentially mobile phases in a long-term manure-amended clayey soil. Geoderma, 2021, 394, 115044.	2.3	3
59	Organic waste-borne ZnS nanoparticles: The forgotten ones. Environmental Pollution, 2022, 308, 119629.	3.7	3
60	Crystal Chemistry of Colloids Obtained by Hydrolysis of Fe(III) in the Presence of SiO4 Ligands. Materials Research Society Symposia Proceedings, 2000, 658, 3361.	0.1	1
61	Fifth Annual SOLEIL Users' Meeting. Synchrotron Radiation News, 2010, 23, 18-20.	0.2	0
62	INVESTIGATION OF TRACE ELEMENTS CONTENT IN ORGANIC WASTES USED FOR MARKET GARDENING. Acta Horticulturae, 2014, , 275-284.	0.1	0