Markus Lenz

List of Publications by Year
in descending order

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66 papers	3,330 citations	147801 31 h-index	149698 56 g-index
68 all docs	68 docs citations	68 times ranked	3975 citing authors

#	Article	IF	Citations
1	Magnesium sensing via LFA-1 regulates CD8+ TÂcell effector function. Cell, 2022, 185, 585-602.e29.	28.9	83
2	Nanofiltration-Enhanced Solvent Extraction of Scandium from TiO₂ Acid Waste. ACS Sustainable Chemistry and Engineering, 2022, 10, 6063-6071.	6.7	6
3	Rapid sequestration of perovskite solar cell-derived lead in soil. Journal of Hazardous Materials, 2022, 436, 128995.	12.4	13
4	Recovery of scandium from acidic waste solutions by means of polymer inclusion membranes. Hydrometallurgy, 2022, 213, 105916.	4.3	9
5	Crystallographic, Optical, and Electronic Properties of the Cs2AgBi1â€“xInxBr6 Double Perovskite: Understanding the Fundamental Photovoltaic Efficiency Challenges. ACS Energy Letters, 2021, 6, 1073-1081.	17.4	19
6	Analysis of Bioavailability and Induction of Glutathione Peroxidase by Dietary Nanoelemental, Organic and Inorganic Selenium. Nutrients, 2021, 13, 1073.	4.1	21
7	Sulfur Amino Acid Status Controls Selenium Methylation in Pseudomonas tolaasii: Identification of a Novel Metabolite from Promiscuous Enzyme Reactions. Applied and Environmental Microbiology, 2021, 87, e0010421.	3.1	4
8	Tellurium and selenium sorption kinetics and solid fractionation under contrasting estuarine salinity and turbidity conditions. Chemical Geology, 2020, 532, 119370.	3.3	9
9	Bioleaching and toxicity of metallurgical wastes. Journal of Environmental Chemical Engineering, 2020, 8, 104450.	6.7	12
10	Biodeterioration Affecting Efficiency and Lifetime of Plastic-Based Photovoltaics. Joule, 2020, 4, 2088-2100.	24.0	6
11	Low-Temperature Reactive Aerosol Processing for Large-Scale Synthesis of Selenium Nanoparticles. Industrial & Engineering Chemistry Research, 2020, 59, 16088-16094.	3.7	5
12	Deterioration of sandstones: Insights from experimental weathering in acidic, neutral and biotic solutions with Acidithiobacillus thiooxidans. Construction and Building Materials, 2020, 246, 118474.	7.2	13
13	Characterization of heavy metal toxicity in some plants and microorganismsâ€”A preliminary approach for environmental bioremediation. New Biotechnology, 2020, 56, 130-139.	4.4	94
14	Biotechnological strategies for the recovery of valuable and critical raw materials from waste electrical and electronic equipment (WEEE) â€“ A review. Journal of Hazardous Materials, 2019, 362, 467-481.	12.4	215
15	Layer-by-layer membrane modification allows scandium recovery by nanofiltration. Environmental Science: Water Research and Technology, 2019, 5, 1683-1688.	2.4	24
16	Rapid metal mobilisation through litter, water and bioweathering as the legacy of historical copper smelting. Journal of Geochemical Exploration, 2019, 206, 106364.	3.2	12
17	Renewable Energy from Finite Resources: Example of Emerging Photovoltaics. Chimia, 2019, 73, 874.	0.6	6
18	Effects of barium on the pathways of anaerobic digestion. Journal of Environmental Management, 2019, 232, 397-403.	7.8	7

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19	An artificial metalloenzyme for carbene transfer based on a biotinylated dirhodium anchored within streptavidin. Catalysis Science and Technology, 2018, 8, 2294-2298.	4.1	41
20	Can iron plaque affect Sb(III) and Sb(V) uptake by plants under hydroponic conditions. Environmental and Experimental Botany, 2018, 148, 168-175.	4.2	20
21	Biodegradation of sulfamethoxazole by a bacterial consortium of Achromobacter denitrificans PR1 and Leucobacter sp. GP. Applied Microbiology and Biotechnology, 2018, 102, 10299-10314.	3.6	36
22	Redox-stat bioreactors for elucidating mobilisation mechanisms of trace elements: an example of As-contaminated mining soils. Applied Microbiology and Biotechnology, 2018, 102, 7635-7641.	3.6	6
23	Ferritin encapsulation of artificial metalloenzymes: engineering a tertiary coordination sphere for an artificial transfer hydrogenase. Dalton Transactions, 2018, 47, 10837-10841.	3.3	28
24	Reâ€ŭsing bauxite residues: benefits beyond (critical raw) material recovery. Journal of Chemical Technology and Biotechnology, 2018, 93, 2498-2510.	3.2	88
25	Red mud as secondary source for critical raw materialsÂâ€“Âextraction study. Journal of Chemical Technology and Biotechnology, 2017, 92, 2835-2844.	3.2	38
26	Red mud as secondary source for critical raw materialsÂâ€“Âpurification of rare earth elements by liquid/liquid extraction. Journal of Chemical Technology and Biotechnology, 2017, 92, 2683-2690.	3.2	14
27	Understanding Selenium Biogeochemistry in Engineered Ecosystems: Transformation and Analytical Methods. , 2017, , 33-56.		4
28	Rhizobacteria and plant symbiosis in heavy metal uptake and its implications for soil bioremediation. New Biotechnology, 2017, 39, 125-134.	4.4	105
29	Immobilization of an artificial imine reductase within silica nanoparticles improves its performance. Chemical Communications, 2016, 52, 9462-9465.	4.1	24
30	Outdoor fate and environmental impact of polymer solar cells through leaching and emission to rainwater and soil. Energy and Environmental Science, 2016, 9, 1674-1680.	30.8	42
31	Arsenic Mobilization from Historically Contaminated Mining Soils in a Continuously Operated Bioreactor: Implications for Risk Assessment. Environmental Science & Technology, 2016, 50, 9124-9132.	10.0	10
32	Methodological approaches for fractionation and speciation to estimate trace element bioavailability in engineered anaerobic digestion ecosystems: An overview. Critical Reviews in Environmental Science and Technology, 2016, 46, 1324-1366.	12.8	40
33	Incineration of organic solar cells: efficient end of life management by quantitative silver recovery. Energy and Environmental Science, 2016, 9, 857-861.	30.8	14
34	Antimony retention and release from drained and waterlogged shooting range soil under field conditions. Chemosphere, 2015, 134, 536-543.	8.2	50
35	Biotechnologies for critical raw material recovery from primary and secondary sources: R&D priorities and future perspectives. New Biotechnology, 2015, 32, 121-127.	4.4	111
36	Antimony leaching from contaminated soil under manganese- and iron-reducing conditions: column experiments. Environmental Chemistry, 2014, 11, 624.	1.5	34

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37	Comparative effects of zinc oxide nanoparticles and dissolved zinc on zebrafish embryos and eleuthero-embryos: Importance of zinc ions. Science of the Total Environment, 2014, 476-477, 657-666.	8.0	123
38	Natural wetland emissions of methylated trace elements. Nature Communications, 2014, 5, 3035.	12.8	69
39	Recycling of Indium From CIGS Photovoltaic Cells: Potential of Combining Acid-Resistant Nanofiltration with Liquidâ€“Liquid Extraction. Environmental Science & Technology, 2014, 48, 13412-13418.	10.0	62
40	Terrestrial selenium distribution in China is potentially linked to monsoonal climate. Nature Communications, 2014, 5, 4717.	12.8	87
41	Release of antimony from contaminated soil induced by redox changes. Journal of Hazardous Materials, 2014, 275, 215-221.	12.4	101
42	Quantification of Methylated Selenium, Sulfur, and Arsenic in the Environment. PLoS ONE, 2014, 9, e102906.	2.5	28
43	Thin-Film Photovoltaic Cells: Long-Term Metal(loid) Leaching at Their End-of-Life. Environmental Science & Technology, 2013, 47, 13151-13159.	10.0	65
44	Colloidal Properties of Nanoparticular Biogenic Selenium Govern Environmental Fate and Bioremediation Effectiveness. Environmental Science & Technology, 2013, 47, 2401-2407.	10.0	90
45	ipso -Hydroxylation and Subsequent Fragmentation: a Novel Microbial Strategy To Eliminate Sulfonamide Antibiotics. Applied and Environmental Microbiology, 2013, 79, 5550-5558.	3.1	105
46	Assessing global cycling of selenium. , 2013, , 5-6.		1
47	Organic photovoltaics: Potential fate and effects in the environment. Environment International, 2012, 49, 128-140.	10.0	42
48	Online Preconcentration-IC-ICP-MS for Selenium Quantification and Speciation at Ultratraces. Environmental Science & Technology, 2012, 46, 11988-11994.	10.0	20
49	Environmental Selenium Research: From Microscopic Processes to Global Understanding. Environmental Science & Technology, 2012, 46, 571-579.	10.0	348
50	Combined Speciation Analysis by X-ray Absorption Near-Edge Structure Spectroscopy, Ion Chromatography, and Solid-Phase Microextraction Gas Chromatographyâ^'Mass Spectrometry To Evaluate Biotreatment of Concentrated Selenium Wastewaters. Environmental Science & Technology, 2011, 45, 1067-1073.	10.0	27
51	Selenium speciation in acidic environmental samples: Application to acid rainâ€“soil interaction at Mount Etna volcano. Chemosphere, 2011, 84, 1664-1670.	8.2	17
52	Purification and characterization of hydroquinone dioxygenase from Sphingomonas sp. strain TTNP3. AMB Express, 2011, 1, 8.	3.0	27
53	Shedding Light on Selenium Biomineralization: Proteins Associated with Bionanominerals. Applied and Environmental Microbiology, 2011, 77, 4676-4680.	3.1	80
54	Sulfur K-edge XANES spectroscopy as a tool for understanding sulfur chemical state in anaerobic granular sludge. Journal of Physics: Conference Series, 2009, 190, 012184.	0.4	10

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55	The essential toxin: The changing perception of selenium in environmental sciences. Science of the Total Environment, 2009, 407, 3620-3633.	8.0	343
56	Bioaugmentation of UASB reactors with immobilized Sulfurospirillum barnesii for simultaneous selenate and nitrate removal. Applied Microbiology and Biotechnology, 2009, 83, 377-388.	3.6	59
57	Impact of bio-augmentation with Sphingomonas sp. strain TTNP3 in membrane bioreactors degrading nonylphenol. Applied Microbiology and Biotechnology, 2009, 84, 183-189.	3.6	22
58	Selenate removal in methanogenic and sulfate-reducing upflow anaerobic sludge bed reactors. Water Research, 2008, 42, 2184-2194.	11.3	133
59	Selenium oxyanion inhibition of hydrogenotrophic and acetoclastic methanogenesis. Chemosphere, 2008, 73, 383-388.	8.2	37
60	Selenium Speciation Assessed by X-Ray Absorption Spectroscopy of Sequentially Extracted Anaerobic Biofilms. Environmental Science & Technology, 2008, 42, 7587-7593.	10.0	41
61	Biological Alkylation and Colloid Formation of Selenium in Methanogenic UASB Reactors. Journal of Environmental Quality, 2008, 37, 1691-1700.	2.0	42
62	Selenium Speciation in Biofilms from Granular Sludge Bed Reactors Used for Wastewater Treatment. AIP Conference Proceedings, 2007, , .	0.4	9
63	Selenium speciation in anaerobic granular sludge. International Journal of Environmental Analytical Chemistry, 2006, 86, 615-627.	3.3	32
64	Sorption and dialysis experiments to assess the binding of phenolic xenobiotics to dissolved organic matter in soil. Environmental Toxicology and Chemistry, 2003, 22, 743-752.	4.3	7
65	SORPTION AND DIALYSIS EXPERIMENTS TO ASSESS THE BINDING OF PHENOLIC XENOBIOTICS TO DISSOLVED ORGANIC MATTER IN SOIL. Environmental Toxicology and Chemistry, 2003, 22, 746.	4.3	24
66	Biological Production of Selenium Nanoparticles from Waste Waters. Advanced Materials Research, 0, 71-73, 721-724.	0.3	14