Peter MatÃºÅ¡

List of Publications by Year
in descending order

56 papers	881 citations	430874 18 h-index	526287 27 g-index
56 all docs	56 docs citations	56 times ranked	961 citing authors

#	Article	IF	Citations
1	Utilization of optimized BCR three-step sequential and dilute HCl single extraction procedures for soilâ€“plant metal transfer predictions in contaminated lands. Talanta, 2008, 75, 1110-1122.	5.5	64
2	Determination of trace amounts of gold in acid-attacked environmental samples by atomic absorption spectrometry with electrothermal atomization after preconcentration. Analytical and Bioanalytical Chemistry, 2004, 379, 60-65.	3.7	51
3	Ascorbic acid protects Coccomyxa subellipsoidea against metal toxicity through modulation of ROS/NO balance and metal uptake. Journal of Hazardous Materials, 2017, 339, 200-207.	12.4	49
4	Fractionation of various elements in CRMs and in polluted soils. Analytical and Bioanalytical Chemistry, 2004, 379, 108-114.	3.7	42
5	Aluminium leaching from red mud by filamentous fungi. Journal of Inorganic Biochemistry, 2015, 152, 154-159.	3.5	42
6	Potential of Microscopic Fungi Isolated from Mercury Contaminated Soils to Accumulate and Volatilize Mercury(II). Water, Air, and Soil Pollution, 2014, 225, 1.	2.4	40
7	Free aluminium extraction from various reference materials and acid soils with relation to plant availability. Talanta, 2006, 70, 996-1005.	5.5	35
8	Bioaccumulation and biovolatilization of various elements using filamentous fungus <i>Scopulariopsis brevicaulis</i>. Letters in Applied Microbiology, 2014, 59, 217-223.	2.2	35
9	Influence of acid mining activity on release of aluminium to the environment. Analytica Chimica Acta, 2005, 547, 119-125.	5.4	33
10	Application of New Resin Gels for Measuring Mercury by Diffusive Gradients in a Thin-films Technique. Analytical Sciences, 2009, 25, 575-578.	1.6	25
11	Antimony leaching from antimony-bearing ferric oxyhydroxides by filamentous fungi and biotransformation of ferric substrate. Science of the Total Environment, 2019, 664, 683-689.	8.0	24
12	Evaluation of separation and determination of phytoavailable and phytotoxic aluminium species fractions in soil, sediment and water samples by five different methods. Journal of Inorganic Biochemistry, 2007, 101, 1214-1223.	3.5	23
13	Chemical partitioning of aluminium in rocks, soils, and sediments acidified by mining activity. Analytical and Bioanalytical Chemistry, 2004, 379, 96-103.	3.7	22
14	Complexation of labile aluminium species by chelating resins Iontosorb â€“ a new method for Al environmental risk assessment. Journal of Inorganic Biochemistry, 2005, 99, 1769-1778.	3.5	22
15	Determination of trace amounts of total dissolved cationic aluminium species in environmental samples by solid phase extraction using nanometer-sized titanium dioxide and atomic spectrometry techniques. Journal of Inorganic Biochemistry, 2009, 103, 1473-1479.	3.5	20
16	Complexation efficiency of differently fixed 8-hydroxyquinoline and salicylic acid ligand groups for labile aluminium species determination in soilsâ€"comparison of two methods. Analytica Chimica Acta, 2006, 573-574, 474-481.	5.4	19
17	Fungal solubilization of manganese oxide and its significance for antimony mobility. International Biodeterioration and Biodegradation, 2016, 114, 157-163.	3.9	19
18	Evaluation of Various Inorganic and Biological Extraction Techniques Suitability for Soil Mercury Phytoavailable Fraction Assessment. Water, Air, and Soil Pollution, 2015, 226, 1.	2.4	18

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19	Fungal Selenium(VI) Accumulation and Biotransformationâ€"Filamentous Fungi in Selenate Contaminated Aqueous Media Remediation. Clean - Soil, Air, Water, 2016, 44, 610-614.	1.1	18
20	Determination of operationally defined fractions of aluminium in reference materials and acid attacked environmental samples. Analytica Chimica Acta, 2005, 540, 33-43.	5.4	17
21	Partitioning and stability of ionic, nano- and microsized zinc in natural soil suspensions. Science of the Total Environment, 2020, 700, 134445.	8.0	17
22	Identifying the origin of soil water repellency at regional level using multiple soil characteristics: The White Carpathians and Myjavska pahorkatina Upland case study. Soil and Water Research, 2015, 10, 78-89.	1.7	15
23	Role of water repellency in aggregate stability of cultivated soils under simulated raindrop impact. Eurasian Soil Science, 2015, 48, 754-758.	1.6	14
24	Aluminium Leaching by Heterotrophic Microorganism Aspergillus niger: An Acidic Leaching?. Arabian Journal for Science and Engineering, 2018, 43, 2369-2374.	3.0	14
25	Coacervative extraction of trace lead from natural waters prior to its determination by electrothermal atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2013, 88, 75-79.	2.9	13
26	Structural transformation of NANOPERM-type metallic glasses followed in situ by synchrotron radiation during thermal annealing in external magnetic field. Journal of Alloys and Compounds, 2015, 638, 398-404.	5.5	13
27	Evaluation of aluminium mobilization from its soil mineral pools by simultaneous effect of Aspergillus strains' acidic and chelating exometabolites. Journal of Inorganic Biochemistry, 2018, 181, 162-168.	3.5	13
28	Chemical mimicking of bio-assisted aluminium extraction by Aspergillus nigerâ€™s exometabolites. Environmental Pollution, 2016, 218, 281-288.	7.5	12
29	Removal of aluminium from aqueous solution by four wild-type strains of Aspergillus niger. Bioprocess and Biosystems Engineering, 2019, 42, 291-296.	3.4	12
30	Sorption of Humic Acids onto Fungal Surfaces and Its Effect on Heavy Metal Mobility. Water, Air, and Soil Pollution, 2014, 225, 1.	2.4	11
31	Iodine fractionation in agricultural and forest soils using extraction methods. Catena, 2020, 195, 104749.	5.0	10
32	Selenite Distribution in Multicomponent System Consisting of Filamentous Fungus, Humic Acids, Bentonite, and Ferric Oxyhydroxides. Water, Air, and Soil Pollution, 2018, 229, 1.	2.4	9
33	Fungal bioextraction of iron from kaolin. Chemical Papers, 2019, 73, 3025-3029.	2.2	9
34	Iodine Fractions in Soil and Their Determination. Forests, 2021, 12, 1512.	2.1	9
35	Distribution of TiO2 Nanoparticles in Acidic and Alkaline Soil and Their Accumulation by Aspergillus niger. Agronomy, 2020, 10, 1833.	3.0	8
36	Mobilisation of hazardous elements from arsenic-rich mine drainage ochres by three Aspergillus species. Journal of Hazardous Materials, 2021, 409, 124938.	12.4	8

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37	Thallium fractionation in polluted environmental samples using a modified BCR three-step sequential extraction procedure and its determination by electrothermal atomic absorption spectrometry. Chemical Papers, 2008, 62, .	2.2	7
38	Fungus Aspergillus niger Processes Exogenous Zinc Nanoparticles into a Biogenic Oxalate Mineral. Journal of Fungi (Basel, Switzerland), 2020, 6, 210.	3.5	7
39	Aspergillus niger enhances oxalate production as a response to phosphate deficiency induced by aluminium(III). Journal of Inorganic Biochemistry, 2020, 204, 110961.	3.5	6
40	Aspergillus niger Decreases Bioavailability of Arsenic(V) via Biotransformation of Manganese Oxide into Biogenic Oxalate Minerals. Journal of Fungi (Basel, Switzerland), 2020, 6, 270.	3.5	6
41	Exchange Counterion in Polycationic Hydrogels: Tunability of Hydrophobicity, Water State, and Floating Capability for a Floating pH Device. Gels, 2021, 7, 109.	4.5	6
42	The Effect of High Selenite and Selenate Concentrations on Ferric Oxyhydroxides Transformation under Alkaline Conditions. International Journal of Molecular Sciences, 2021, 22, 9955.	4.1	6
43	Mercury in mercury(II)-spiked soils is highly susceptible to plant bioaccumulation. International Journal of Phytoremediation, 2016, 18, 195-199.	3.1	5
44	Increased Colloidal Stability and Decreased Solubilityâ€"Solâ€"Gel Synthesis of Zinc Oxide Nanoparticles with Humic Acids. Journal of Nanoscience and Nanotechnology, 2019, 19, 3024-3030.	0.9	5
45	Bioleaching of Manganese Oxides at Different Oxidation States by Filamentous Fungus Aspergillus niger. Journal of Fungi (Basel, Switzerland), 2021, 7, 808.	3.5	5
46	Fungal Mobilization of Selenium in the Presence of Hausmannite and Ferric Oxyhydroxides. Journal of Fungi (Basel, Switzerland), 2021, 7, 810.	3.5	5
47	Bismuth(III) Volatilization and Immobilization by Filamentous Fungus Aspergillus clavatus During Aerobic Incubation. Archives of Environmental Contamination and Toxicology, 2015, 68, 405-411.	4.1	4
48	Sequential Extraction Resulted in Similar Fractionation of Ionic Zn, Nano- and Microparticles of ZnO in Acidic and Alkaline Soil. Forests, 2020, 11, 1077.	2.1	4
49	Structural modifications of metallic glasses followed by techniques of nuclear resonances. Pure and Applied Chemistry, 2017, 89, 405-417.	1.9	3
50	Low temperature behavior of hyperfine fields in amorphous and nanocrystalline FeMoCuB. Journal of Applied Physics, 2015, 117, 17B718.	2.5	2
51	Fungal-induced modification of spontaneously precipitated ochreous sediments from drainage of abandoned antimony mine. Chemosphere, 2021, 269, 128733.	8.2	2
52	Comparison of two morphologically different fungal biomass types for experimental separation of labile aluminium species using atomic spectrometry methods. Chemical Papers, 2019, 73, 3019-3023.	2.2	1
53	Surface Features of Nanocrystalline Alloys. Croatica Chemica Acta, 2015, 88, 539-545.	0.4	1
54	Temperature Behaviour of Hyperfine Magnetic Fields in a Fe-Co-Si-B-Mo-P Metallic Glass Followed with ^{57}Fe MÃ¶ssbauer Spectrometry. Acta Physica Polonica A, 2017, 131, 744-746.	0.5	1

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55	Methods of Ex Situ and In Situ Investigations of Structural Transformations: The Case of Crystallization of Metallic Glasses. Journal of Visualized Experiments, 2018, , .	0.3	0
56	Sorptive and Redox Interactions of Humic Substances and Metal(loid)s in the Presence of Microorganisms. Fungal Biology, 2021, , 201-215.	0.6	0