

# Mikael Motelica-Heino

## List of Publications by Year in descending order

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93  
papers

3,564  
citations

117619

34  
h-index

149686

56  
g-index

93  
all docs

93  
docs citations

93  
times ranked

4439  
citing authors

#	ARTICLE	IF	CITATIONS
1	Conformation and size of humic substances: Effects of major cation concentration and type, pH, salinity, and residence time. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 272, 48-55.	4.7	220
2	Iron isotope fractionation during microbially stimulated Fe(II) oxidation and Fe(III) precipitation. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 622-639.	3.9	202
3	Simultaneous Release of Metals and Sulfide in Lacustrine Sediment. <i>Environmental Science &amp; Technology</i> , 2003, 37, 4374-4381.	10.0	109
4	Transfer and degradation of polyacrylamide-based flocculants in hydrosystems: a review. <i>Environmental Science and Pollution Research</i> , 2015, 22, 6390-6406.	5.3	106
5	Size-Based Speciation of Natural Colloidal Particles by Flow Field Flow Fractionation, Inductively Coupled Plasma-Mass Spectroscopy, and Transmission Electron Microscopy/X-ray Energy Dispersive Spectroscopy: A Colloids-Trace Element Interaction. <i>Environmental Science &amp; Technology</i> , 2006, 40, 2156-2162.	10.0	104
6	Critical assessment of platinum group element determination in road and urban river sediments using ultrasonic nebulisation and high resolution ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2000, 15, 329-334.	3.0	102
7	Magnetite (Fe <sub>3</sub> O <sub>4</sub> ) nanoparticles as adsorbents for As and Cu removal. <i>Applied Clay Science</i> , 2016, 134, 128-135.	5.2	99
8	Size fractionation and characterization of natural colloids by flow-field flow fractionation coupled to multi-angle laser light scattering. <i>Journal of Chromatography A</i> , 2006, 1104, 272-281.	3.7	98
9	Chemical and spectroscopic characterization of humic acids extracted from the bottom sediments of a Brazilian subtropical microbasin. <i>Journal of Molecular Structure</i> , 2010, 981, 111-119.	3.6	93
10	Effect of biochar amendments on As and Pb mobility and phytoavailability in contaminated mine technosols phytoremediated by <i>Salix</i> . <i>Journal of Geochemical Exploration</i> , 2017, 182, 149-156.	3.2	93
11	Determination of palladium, platinum and rhodium concentrations in urban road sediments by laser ablation-ICP-MS. <i>Analytica Chimica Acta</i> , 2001, 436, 233-244.	5.4	89
12	Simultaneous release of sulfide with Fe, Mn, Ni and Zn in marine harbour sediment measured using a combined metal/sulfide DGT probe. <i>Science of the Total Environment</i> , 2004, 328, 275-286.	8.0	87
13	Study on Europium-Doped Hydroxyapatite Nanoparticles by Fourier Transform Infrared Spectroscopy and Their Antimicrobial Properties. <i>Journal of Spectroscopy</i> , 2013, 2013, 1-10.	1.3	81
14	Elemental Association and Fingerprinting of Traffic-Related Metals in Road Sediments. <i>Environmental Science &amp; Technology</i> , 2000, 34, 3119-3123.	10.0	71
15	Evaluation of Antibacterial Activity of Zinc-Doped Hydroxyapatite Colloids and Dispersion Stability Using Ultrasounds. <i>Nanomaterials</i> , 2019, 9, 515.	4.1	66
16	Supramolecular structure of humic acids by TEM with improved sample preparation and staining. <i>Microscopy Research and Technique</i> , 2005, 66, 299-306.	2.2	63
17	Effect of biochar amendments on the mobility and (bio) availability of As, Sb and Pb in a contaminated mine technosol. <i>Journal of Geochemical Exploration</i> , 2017, 182, 138-148.	3.2	62
18	Groundwater resources use and management in the Amu Darya River Basin (Central Asia). <i>Environmental Earth Sciences</i> , 2010, 59, 1183-1193.	2.7	61

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19	Structural and Biological Assessment of Zinc Doped Hydroxyapatite Nanoparticles. Journal of Nanomaterials, 2016, 2016, 1-10.	2.7	59
20	Mobility of Pb, Zn, Ba, As and Cd toward soil pore water and plants (willow and ryegrass) from a mine soil amended with biochar. Journal of Environmental Management, 2019, 232, 117-130.	7.8	56
21	Micro- and macro-scale investigation of fractionation and matrix effects in LA-ICP-MS at 1064Ånm and 266Ånm on glassy materials. Journal of Analytical Atomic Spectrometry, 2001, 16, 542-550.	3.0	55
22	Natural sample fractionation by FIFFFâ€“MALLSâ€“TEM: Sample stabilization, preparation, pre-concentration and fractionation. Journal of Chromatography A, 2005, 1093, 156-166.	3.7	53
23	Nonionic organoclay: A â€“Swiss Army knifeâ€™ for the adsorption of organic micro-pollutants?. Journal of Colloid and Interface Science, 2015, 437, 71-79.	9.4	53
24	Synthesis of Al doped ZnO nanoparticles by aqueous coprecipitation. Powder Technology, 2014, 262, 203-208.	4.2	51
25	3D characterization of natural colloids by FIFFF-MALLS-TEM. Analytical and Bioanalytical Chemistry, 2005, 383, 549-556.	3.7	45
26	Effect of fresh and mature organic amendments on the phytoremediation of technosols contaminated with high concentrations of trace elements. Journal of Environmental Management, 2015, 159, 37-47.	7.8	45
27	Laser ablation of synthetic geological powders using ICP-AES detection: effects of the matrix, chemical form of the analyte and laser wavelength. Journal of Analytical Atomic Spectrometry, 1999, 14, 675-682.	3.0	42
28	Structure, orientation and stability of lysozyme confined in layered materials. Soft Matter, 2013, 9, 3188.	2.7	42
29	Adsorption of Pb (II) Ions onto Hydroxyapatite Nanopowders in Aqueous Solutions. Materials, 2018, 11, 2204.	2.9	42
30	Isotopic precision for a lead species (PbEt4) using capillary gas chromatography coupled to inductively coupled plasma-multicollector mass spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2001, 56, 1233-1240.	2.9	41
31	Effect of organic amendments on the mobility of trace elements in phytoremediated techno-soils: role of the humic substances. Environmental Science and Pollution Research, 2014, 21, 10470-10480.	5.3	40
32	Cd, Pb, and Zn mobility and (bio)availability in contaminated soils from a former smelting site amended with biochar. Environmental Science and Pollution Research, 2018, 25, 25744-25756.	5.3	40
33	Tracking Holocene glacial and high-altitude alpine environments fluctuations from minerogenic and organic markers in proglacial lake sediments (Lake Blanc Huez, Western French Alps). Quaternary Science Reviews, 2014, 89, 27-43.	3.0	37
34	Geostatistical approach for the assessment of the water reservoir capacity in arid regions: a case study of the Akdarya reservoir, Uzbekistan. Environmental Earth Sciences, 2011, 63, 447-460.	2.7	34
35	Potentially toxic element phytoavailability assessment in Technosols from former smelting and mining areas. Environmental Science and Pollution Research, 2015, 22, 5961-5974.	5.3	34
36	Synthesis and characterization of polysaccharide-maghemite composite nanoparticles and their antibacterial properties. Nanoscale Research Letters, 2012, 7, 576.	5.7	33

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37	Aided phytoextraction of Cu, Pb, Zn, and As in copper-contaminated soils with tobacco and sunflower in crop rotation: Mobility and phytoavailability assessment. <i>Chemosphere</i> , 2016, 145, 543-550.	8.2	33
38	Distribution of trace elements in waters and sediments of the Seversky Donets transboundary watershed (Kharkiv region, Eastern Ukraine). <i>Applied Geochemistry</i> , 2012, 27, 2077-2087.	3.0	32
39	Potentially toxic element fractionation in technosoils using two sequential extraction schemes. <i>Environmental Science and Pollution Research</i> , 2014, 21, 5054-5065.	5.3	32
40	Assessment of earthworm activity on Cu, Cd, Pb and Zn bioavailability in contaminated soils using biota to soil accumulation factor and DTPA extraction. <i>Ecotoxicology and Environmental Safety</i> , 2020, 195, 110513.	6.0	32
41	Iron isotopes in acid mine waters and iron-rich solids from the Tinto-Odiel Basin (Iberian Pyrite Belt). <i>Journal of Geochemical Exploration</i> , 2013, 136, 14-23.	3.3	31
42	Zinc Doped Hydroxyapatite Thin Films Prepared by Sol-Gel Spin Coating Procedure. <i>Coatings</i> , 2019, 9, 156.	2.6	30
43	Facts and Perspectives of Water Reservoirs in Central Asia: A Special Focus on Uzbekistan. <i>Water (Switzerland)</i> , 2010, 2, 307-320.	2.7	28
44	Magnetic Properties and Biological Activity Evaluation of Iron Oxide Nanoparticles. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-7.	2.7	27
45	Long-term Cu stabilization and biomass yields of Giant reed and poplar after adding a biochar, alone or with iron grit, into a contaminated soil from a wood preservation site. <i>Science of the Total Environment</i> , 2017, 579, 620-627.	8.0	27
46	Carbon Nanotubes-Hydroxyapatite Nanocomposites for an Improved Osteoblast Cell Response. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-10.	2.7	25
47	Macro and microchemistry of trace metals in vitrified domestic wastes by laser ablation ICP-MS and scanning electron microprobe X-ray energy dispersive spectroscopy. <i>Talanta</i> , 1998, 46, 407-422.	5.5	24
48	Effect of Basic Slag Addition on Soil Properties, Growth and Leaf Mineral Composition of Beans in a Cu-Contaminated Soil. <i>Soil and Sediment Contamination</i> , 2010, 19, 174-187.	1.9	24
49	Mobility and phytoavailability of Cu, Cr, Zn, and As in a contaminated soil at a wood preservation site after 4 years of aided phytostabilization. <i>Environmental Science and Pollution Research</i> , 2014, 21, 10307-10319.	5.3	24
50	Properties of Basil and Lavender Essential Oils Adsorbed on the Surface of Hydroxyapatite. <i>Materials</i> , 2018, 11, 652.	2.9	24
51	Removal of Zinc Ions Using Hydroxyapatite and Study of Ultrasound Behavior of Aqueous Media. <i>Materials</i> , 2018, 11, 1350.	2.9	23
52	Obtaining and Characterizing Thin Layers of Magnesium Doped Hydroxyapatite by Dip Coating Procedure. <i>Coatings</i> , 2020, 10, 510.	2.6	23
53	Monitoring and flux determination of trace metals in rivers of the Seversky Donets basin (Ukraine) using DGT passive samplers. <i>Environmental Earth Sciences</i> , 2012, 65, 1715-1725.	2.7	22
54	Application of an inverse neural network model for the identification of optimal amendment to reduce copper toxicity in phytoremediated contaminated soils. <i>Journal of Geochemical Exploration</i> , 2014, 136, 14-23.	3.2	21

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55	Systematic investigation and in vitro biocompatibility studies on mesoporous europium doped hydroxyapatite. <i>Open Chemistry</i> , 2014, 12, 1032-1046.	1.9	20
56	The role of mangrove fine root production and decomposition on soil organic carbon component ratios. <i>Ecological Indicators</i> , 2021, 125, 107525.	6.3	20
57	Comparison of UV and IR Laser Ablation ICP-MS on Silicate Reference Materials and Implementation of Normalisation Factors for Quantitative Measurements. <i>Geostandards and Geoanalytical Research</i> , 2001, 25, 345-359.	3.1	19
58	In situ stabilization of trace metals in a copper-contaminated soil using P-spiked Linzâ€™Donawitz slag. <i>Environmental Science and Pollution Research</i> , 2012, 19, 847-857.	5.3	19
59	Groundwater resources of Uzbekistan: an environmental and operational overview. <i>Open Geosciences</i> , 2012, 4, .	1.7	19
60	Rhizosphere effects of <i>Populus euramericana</i> Dorskamp on the mobility of Zn, Pb and Cd in contaminated technosols. <i>Journal of Soils and Sediments</i> , 2016, 16, 811-820.	3.0	19
61	Investigation of Spin Coating Cerium-Doped Hydroxyapatite Thin Films with Antifungal Properties. <i>Coatings</i> , 2021, 11, 464.	2.6	19
62	Neural network and Monte Carlo simulation approach to investigate variability of copper concentration in phytoremediated contaminated soils. <i>Journal of Environmental Management</i> , 2013, 129, 134-142.	7.8	18
63	Removal and Oxidation of As(III) from Water Using Iron Oxide Coated CTAB as Adsorbent. <i>Polymers</i> , 2020, 12, 1687.	4.5	18
64	Preparation of Porous Hydroxyapatite Using Cetyl Trimethyl Ammonium Bromide as Surfactant for the Removal of Lead Ions from Aquatic Solutions. <i>Polymers</i> , 2021, 13, 1617.	4.5	18
65	Suspended particulate matter determines physical speciation of Fe, Mn, and trace metals in surface waters of Loire watershed. <i>Environmental Science and Pollution Research</i> , 2019, 26, 5251-5266.	5.3	17
66	Dextran-Thyme Magnesium-Doped Hydroxyapatite Composite Antimicrobial Coatings. <i>Coatings</i> , 2020, 10, 57.	2.6	17
67	Phytostabilisation of a copper contaminated topsoil aided by basic slags: assessment of Cu mobility and phytoavailability. <i>Journal of Soils and Sediments</i> , 2017, 17, 1262-1271.	3.0	16
68	Direct Determination of Lead Isotope Ratios by Laser Ablation-Inductively Coupled Plasma-Quadrupole Mass Spectrometry in Lake Sediment Samples. <i>Geostandards and Geoanalytical Research</i> , 2001, 25, 387-398.	3.1	15
69	Surface characterization and depth profile analysis of glasses by r.f. GDOES. <i>Surface and Interface Analysis</i> , 2003, 35, 623-629.	1.8	15
70	Effect of nitrate and ammonium fertilization on Zn, Pb, and Cd phytostabilization by <i>Populus euramericana</i> Dorskamp in contaminated technosol. <i>Environmental Science and Pollution Research</i> , 2015, 22, 18759-18771.	5.3	15
71	Diffusive gradients in thin films, Rhizon soil moisture samplers, and indicator plants to predict the bioavailabilities of potentially toxic elements in contaminated technosols. <i>Environmental Science and Pollution Research</i> , 2016, 23, 8367-8378.	5.3	14
72	Application of neural network model for the prediction of chromium concentration in phytoremediated contaminated soils. <i>Journal of Geochemical Exploration</i> , 2013, 128, 25-34.	3.2	13

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73	A 7000-year environmental history and soil erosion record inferred from the deep sediments of Lake Pavin (Massif Central, France). <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2018, 497, 218-233.	2.3	13
74	The structure and role of the "petola" microbial mat in sea salt production of the Sečovlje (Slovenia). <i>Science of the Total Environment</i> , 2018, 644, 1254-1267.	8.0	12
75	Microcosm-scale biogeochemical stabilization of Pb, As, Ba and Zn in mine tailings amended with manure and ochre. <i>Applied Geochemistry</i> , 2019, 111, 104438.	3.0	12
76	Effects of soil acid stress on the survival, growth, reproduction, antioxidant enzyme activities, and protein contents in earthworm ( <i>Eisenia fetida</i> ). <i>Environmental Science and Pollution Research</i> , 2020, 27, 33419-33428.	5.3	12
77	Impact of Fe(III) (Oxyhydr)oxides Mineralogy on Iron Solubilization and Associated Microbial Communities. <i>Frontiers in Microbiology</i> , 2020, 11, 571244.	3.5	12
78	Assessment of Trace Metals during Episodic Events using DGT Passive Sampler: A Proposal for Water Management Enhancement. <i>Water Resources Management</i> , 2013, 27, 4163-4181.	3.9	11
79	Tetraethyl Orthosilicate Coated Hydroxyapatite Powders for Lead Ions Removal from Aqueous Solutions. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-7.	2.7	11
80	Effect of copper content on the synthesis and properties of $(Mg_{4-x}Cu_x)Al_2(OH)_2CO_3 \cdot nH_2O$ layered double hydroxides. <i>Journal of Materials Science</i> , 2015, 50, 1427-1434.	3.7	11
81	Development of Silver Doped Hydroxyapatite Thin Films for Biomedical Applications. <i>Coatings</i> , 2022, 12, 341.	2.6	11
82	Real time alteration of a nuclear waste glass and remobilization of lanthanide into an interphase. <i>Waste Management</i> , 2000, 20, 731-739.	7.4	10
83	Remobilisation of uranium from contaminated freshwater sediments by bioturbation. <i>Biogeosciences</i> , 2014, 11, 3381-3396.	3.3	9
84	Biocompatible Layers Obtained from Functionalized Iron Oxide Nanoparticles in Suspension. <i>Coatings</i> , 2019, 9, 773.	2.6	9
85	Impacts of earthworm species on soil acidification, Al fractions, and base cation release in a subtropical soil from China. <i>Environmental Science and Pollution Research</i> , 2020, 27, 33446-33457.	5.3	8
86	Assessment of bioremediation potential of metal contaminated soils (Cu, Cd, Pb and Zn) by earthworms from their tolerance, accumulation and impact on metal activation and soil quality: A case study in South China. <i>Science of the Total Environment</i> , 2022, 820, 152834.	8.0	8
87	Trends of labile trace metals in tropical urban water under highly contrasted weather conditions. <i>Environmental Science and Pollution Research</i> , 2015, 22, 13842-13857.	5.3	7
88	Water and acrylamide monomer transfer rates from a settling basin to groundwaters. <i>Environmental Science and Pollution Research</i> , 2015, 22, 6431-6439.	5.3	3
89	Determinants of Agroecological Practices Adoption in the Sudano-Sahelian Zone. <i>Journal of Environmental Protection</i> , 2019, 10, 900-918.	0.7	3
90	Nitrogen and Bromide Co-Doped Hydroxyapatite Thin Films with Antimicrobial Properties. <i>Coatings</i> , 2021, 11, 1505.	2.6	1

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91	Advances in Functionalized Materials Research. Journal of Nanomaterials, 2015, 2015, 1-2.	2.7	0
92	Advances in Functionalized Materials Research 2016. Journal of Nanomaterials, 2017, 2017, 1-2.	2.7	0
93	Uptake of Three Pharmaceuticals by Beans ( <i>Phaseolus vulgaris</i> L.) from Contaminated Soils. Baghdad Science Journal, 2020, 17, 0733.	0.6	0