

# Volker Nischwitz

## List of Publications by Year in descending order

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61  
papers

2,097  
citations

218381

26  
h-index

243296

44  
g-index

64  
all docs

64  
docs citations

64  
times ranked

2453  
citing authors

#	ARTICLE	IF	CITATIONS
1	ICP-MS for the analysis at the nanoscale – a tutorial review. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 1432-1468.	1.6	156
2	Histology and Gadolinium Distribution in the Rodent Brain After the Administration of Cumulative High Doses of Linear and Macrocyclic Gadolinium-Based Contrast Agents. <i>Investigative Radiology</i> , 2017, 52, 324-333.	3.5	144
3	Speciation analysis of selected metals and determination of their total contents in paired serum and cerebrospinal fluid samples: An approach to investigate the permeability of the human blood-cerebrospinal fluid-barrier. <i>Analytica Chimica Acta</i> , 2008, 627, 258-269.	2.6	124
4	Improved sample preparation and quality control for the characterisation of titanium dioxide nanoparticles in sunscreens using flow field flow fractionation on-line with inductively coupled plasma mass spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2012, 27, 1084.	1.6	101
5	Long-term Excretion of Gadolinium-based Contrast Agents: Linear versus Macrocyclic Agents in an Experimental Rat Model. <i>Radiology</i> , 2019, 290, 340-348.	3.6	84
6	Speciation and toxicological relevance of manganese in humans. <i>Journal of Environmental Monitoring</i> , 2007, 9, 650.	2.1	78
7	Leaching of natural colloids from forest topsoils and their relevance for phosphorus mobility. <i>Science of the Total Environment</i> , 2018, 634, 305-315.	3.9	74
8	The potential of asymmetric flow field-flow fractionation hyphenated to multiple detectors for the quantification and size estimation of silica nanoparticles in a food matrix. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 3919-3927.	1.9	72
9	JEM Spotlight: Metal speciation related to neurotoxicity in humans. <i>Journal of Environmental Monitoring</i> , 2009, 11, 939.	2.1	69
10	Review on metal speciation analysis in cerebrospinal fluid – current methods and results: A review. <i>Analytica Chimica Acta</i> , 2010, 682, 23-36.	2.6	68
11	Phosphorus Containing Water Dispersible Nanoparticles in Arable Soil. <i>Journal of Environmental Quality</i> , 2015, 44, 1772-1781.	1.0	61
12	Distribution of Phosphorus-Containing Fine Colloids and Nanoparticles in Stream Water of a Forest Catchment. <i>Vadose Zone Journal</i> , 2014, 13, 1-11.	1.3	59
13	First report on the detection and quantification of arsenobetaine in extracts of marine algae using HPLC-ES-MS/MS. <i>Analyst</i> , 2005, 130, 1348.	1.7	56
14	Phosphorus Binding to Nanoparticles and Colloids in Forest Stream Waters. <i>Vadose Zone Journal</i> , 2017, 16, 1-12.	1.3	54
15	Phosphorus in water dispersible-colloids of forest soil profiles. <i>Plant and Soil</i> , 2018, 427, 71-86.	1.8	51
16	Liquid Chromatography Online with Selected Reaction Monitoring Electrospray Mass Spectrometry for the Determination of Organoarsenic Species in Crude Extracts of Marine Reference Materials. <i>Analytical Chemistry</i> , 2005, 77, 5551-5563.	3.2	50
17	Mass spectrometric identification of novel arsinothiopyl-sugars in marine bivalves and algae. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 33-40.	1.6	48
18	Elemental Composition of Natural Nanoparticles and Fine Colloids in European Forest Stream Waters and Their Role as Phosphorus Carriers. <i>Global Biogeochemical Cycles</i> , 2017, 31, 1592-1607.	1.9	48

#	ARTICLE	IF	CITATIONS
19	Dynamic Monitoring of Metal Oxide Nanoparticle Toxicity by Label Free Impedance Sensing. <i>Chemical Research in Toxicology</i> , 2012, 25, 140-152.	1.7	46
20	Optimisation of an HPLC selected reaction monitoring electrospray tandem mass spectrometry method for the detection of 50 arsenic species. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 1277.	1.6	44
21	Speciation of Pt(II) and Pt(IV) in spiked extracts from road dust using on-line liquid chromatography-inductively coupled plasma mass spectrometry. <i>Journal of Chromatography A</i> , 2003, 1016, 223-234.	1.8	38
22	Identification and quantification of metallothionein isoforms and superoxide dismutase in spiked liver extracts using HPLC-ESI-MS offline coupling and HPLC-ICP-MS online coupling. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 375, 145-156.	1.9	37
23	Improved Arsenic Speciation Analysis for Extracts of Commercially Available Edible Marine Algae Using HPLC-ES-MS/MS. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 6507-6519.	2.4	37
24	Colloid-bound and dissolved phosphorus species in topsoil water extracts along a grassland transect from Cambisol to Stagnosol. <i>Biogeosciences</i> , 2017, 14, 1153-1164.	1.3	33
25	Organic Carbon Linkage with Soil Colloidal Phosphorus at Regional and Field Scales: Insights from Size Fractionation of Fine Particles. <i>Environmental Science &amp; Technology</i> , 2021, 55, 5815-5825.	4.6	32
26	Field flow fractionation online with ICP-MS as novel approach for the quantification of fine particulate carbon in stream water samples and soil extracts. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 1858-1868.	1.6	30
27	Determination of selenosugars in crude human urine using high-performance liquid chromatography/atmospheric pressure chemical ionization tandem mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2007, 21, 343-351.	0.7	28
28	Boron Depletion in a Nickel Base Superalloy Induced by High Temperature Oxidation. <i>Oxidation of Metals</i> , 2015, 83, 393-413.	1.0	27
29	Electrospray ionisation with selected reaction monitoring for the determination of Mn <sup>2+</sup> , Fe <sup>2+</sup> , Cu <sup>2+</sup> and Zn <sup>2+</sup> . <i>Rapid Communications in Mass Spectrometry</i> , 2009, 23, 2338-2346.	0.7	22
30	Optimisation of extraction procedures for metallothionein-isoforms and superoxide dismutase from liver samples using spiking experiments. <i>Analyst</i> , 2003, 128, 109-115.	1.7	21
31	Rapid size fractionation of metal species in paired human serum and cerebrospinal fluid samples using ultrafiltration with off-line element selective detection. <i>Journal of Analytical Atomic Spectrometry</i> , 2010, 25, 1130.	1.6	21
32	Mapping of arsenic species and identification of a novel arsenosugar in giant clams <i>Tridacna maxima</i> and <i>Tridacna derasa</i> using advanced mass spectrometric techniques. <i>Environmental Chemistry</i> , 2007, 4, 187.	0.7	20
33	Investigations on extraction procedures for Pt species from spiked road dust samples using HPLC-ICP-MS detection. <i>Analytica Chimica Acta</i> , 2004, 521, 87-98.	2.6	18
34	Molecular composition of the human primary visual cortex profiled by multimodal mass spectrometry imaging. <i>Brain Structure and Function</i> , 2018, 223, 2767-2783.	1.2	18
35	PET/MRI enables simultaneous <i>in vivo</i> quantification of <sup>18</sup> F-cell mass and function. <i>Theranostics</i> , 2020, 10, 398-410.	4.6	18
36	Extraction and characterisation of trace element species from porcine liver samples using online HPLC-ICP-MS and offline HPLC-ESI-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2003, 18, 444-451.	1.6	17

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37	Speciation studies of vanadium in human liver (HepG2) cells after in vitro exposure to bis(maltolato)oxovanadium(IV) using HPLC online with elemental and molecular mass spectrometry. <i>Metallomics</i> , 2013, 5, 1685.	1.0	15
38	Effect of alloy composition on the oxidation-induced boron depletion in cast Ni-base superalloy components. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2017, 68, 171-185.	0.8	15
39	Identification of the novel thio-arsenosugars DMThioAsSugarCarboxyl, DMThioAsSugarCarbamate and DMThioAsSugarAdenine in extracts of giant clam tissues by high-performance liquid chromatography online with electrospray tandem mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2006, 20, 3579-3585.	0.7	14
40	First comprehensive study on total contents and hot water extractable fraction of selected elements in 19 medicinal plants from various locations in Nyamira County, Kenya. <i>Journal of Trace Elements in Medicine and Biology</i> , 2017, 39, 54-61.	1.5	13
41	Application of FTIR and LA-ICPMS Spectroscopies as a Possible Approach for Biochemical Analyses of Different Rat Brain Regions. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2436.	1.3	13
42	Groundwater controls on colloidal transport in forest stream waters. <i>Science of the Total Environment</i> , 2020, 717, 134638.	3.9	13
43	Quantitative detection of $\alpha$ -Synuclein and Tau oligomers and other aggregates by digital single particle counting. <i>Npj Parkinson's Disease</i> , 2022, 8, .	2.5	13
44	Extending the capabilities of field flow fractionation online with ICP-MS for the determination of particulate carbon in latex and charcoal. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 1363-1371.	1.6	12
45	A novel approach for determination of the dissolved and the particulate fractions in aqueous samples by flow field flow fractionation <i>via</i> online monitoring of both the cross flow and the detector flow using ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 548-559.	1.6	12
46	Sequential Extraction as Novel Approach to Compare 12 Medicinal Plants From Kenya Regarding Their Potential to Release Chromium, Manganese, Copper, and Zinc. <i>Biological Trace Element Research</i> , 2018, 182, 407-422.	1.9	11
47	Exploring the upper particle size limit for field flow fractionation online with ICP-MS to address the challenges of water samples from the Taihu Lake. <i>Analytica Chimica Acta</i> , 2020, 1093, 16-27.	2.6	10
48	Citric Acid Effect on the Abundance, Size and Composition of Water-Dispersible Soil Colloids and Its Relationship to Soil Phosphorus Desorption: A Case Study. <i>Journal of Soil Science and Plant Nutrition</i> , 2021, 21, 2436-2446.	1.7	9
49	Comparison of aqueous and enzymatic extraction combination with sequential filtration for the profiling of selected trace elements in medicinal plants from Kenya. <i>Journal of Trace Elements in Medicine and Biology</i> , 2019, 54, 1-7.	1.5	7
50	Preparative field flow fractionation for complex environmental samples: online detection by inductively coupled plasma mass spectrometry and offline detection by gas chromatography with flame ionization. <i>Journal of Chromatography A</i> , 2020, 1632, 461581.	1.8	7
51	A species-specific double isotope dilution strategy for the accurate quantification of platinum-GG adducts in lung cells exposed to carboplatin. <i>Journal of Analytical Atomic Spectrometry</i> , 2017, 32, 1320-1330.	1.6	5
52	Speciation and Element-Specific Detection. , 2013, , 633-649.		4
53	Inert sampling and sample preparation – the influence of oxygen on heavy metal mobility in river sediments. <i>Fresenius' Journal of Analytical Chemistry</i> , 2001, 371, 643-651.	1.5	3
54	Spectroscopic characterization of the Co-substituted C-terminal domain of rubredoxin-2. <i>Biological Chemistry</i> , 2018, 399, 787-798.	1.2	3

#	ARTICLE	IF	CITATIONS
55	Development of a novel online sequential extraction method for the characterisation of fine dust sources using inductively coupled plasma mass spectrometric detection. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 174, 105993.	1.5	2
56	Origin of Steam Contaminants and Degradation of Solid-Oxide Electrolysis Stacks. Processes, 2022, 10, 598.	1.3	2
57	4th International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences. Analytical and Bioanalytical Chemistry, 2009, 393, 415-418.	1.9	1
58	In Vitro Reconstitution of the Highly Active and Natively Folded Recombinant Human Superoxide Dismutase 1 Holoenzyme. ChemistrySelect, 2018, 3, 7627-7632.	0.7	1
59	Cascade Filtration With PCR Detection and Field-Flow-Fractionation Online With ICP-MS for the Characterization of DNA Interaction With Suspended Particulate Matter. Frontiers in Chemistry, 0, 10, .	1.8	1
60	Speciation and element-specific detection. , 2017, , 753-767.		0
61	Characterisation of temporal and regional differences in the elemental fractionation and mobility of urban particulate matter via online sequential extraction. International Journal of Environmental Analytical Chemistry, 0, , 1-17.	1.8	0