Stephan Wagner

List of Publications by Year
in descending order

50 papers	4,340 citations	218677 26 h-index	206112 48 g-index
54 all docs	54 docs citations	54 times ranked	5149 citing authors

#	ARTICLE	IF	CITATIONS
1	Export of Plastic Debris by Rivers into the Sea. Environmental Science & Technology, 2017, 51, 12246-12253.	10.0	881
2	Nanoparticles in the environment: where do we come from, where do we go to?. Environmental Sciences Europe, 2018, 30, 6.	5.5	595
3	Tire wear particles in the aquatic environment - A review on generation, analysis, occurrence, fate and effects. Water Research, 2018, 139, 83-100.	11.3	506
4	Release of TiO₂ Nanoparticles from Sunscreens into Surface Waters: A One-Year Survey at the Old Danube Recreational Lake. Environmental Science & Technology, 2014, 48, 5415-5422.	10.0	344
5	Spot the Difference: Engineered and Natural Nanoparticles in the Environmentâ€”Release, Behavior, and Fate. Angewandte Chemie - International Edition, 2014, 53, 12398-12419.	13.8	210
6	Detection and characterization of silver nanoparticles in chicken meat by asymmetric flow field flow fractionation with detection by conventional or single particle ICP-MS. Analytical and Bioanalytical Chemistry, 2013, 405, 8185-8195.	3.7	178
7	Things we know and donâ€™t know about nanoplastic in the environment. Nature Nanotechnology, 2019, 14, 300-301.	31.5	172
8	Tire and road wear particles in road environment â€“ Quantification and assessment of particle dynamics by Zn determination after density separation. Chemosphere, 2019, 222, 714-721.	8.2	149
9	Microplastic Exposure Assessment in Aquatic Environments: Learning from Similarities and Differences to Engineered Nanoparticles. Environmental Science & Technology, 2017, 51, 2499-2507.	10.0	146
10	Optimization and evaluation of asymmetric flow field-flow fractionation of silver nanoparticles. Journal of Chromatography A, 2013, 1272, 116-125.	3.7	84
11	Relationship between Discharge and River Plastic Concentrations in a Rural and an Urban Catchment. Environmental Science & Technology, 2019, 53, 10082-10091.	10.0	82
12	Comprehensive characterization of tire and road wear particles in highway tunnel road dust by use of size and density fractionation. Chemosphere, 2021, 279, 130530.	8.2	77
13	Characterization of tire and road wear particles from road runoff indicates highly dynamic particle properties. Water Research, 2020, 185, 116262.	11.3	68
14	First steps towards a generic sample preparation scheme for inorganic engineered nanoparticles in a complex matrix for detection, characterization, and quantification by asymmetric flow-field flow fractionation coupled to multi-angle light scattering and ICP-MS. Journal of Analytical Atomic Spectrometry, 2015, 30, 1286-1296.	3.0	66
15	Sorption of organic substances to tire wear materials: Similarities and differences with other types of microplastic. TrAC - Trends in Analytical Chemistry, 2019, 113, 392-401.	11.4	65
16	Source-related smart suspect screening in the aqueous environment: search for tire-derived persistent and mobile trace organic contaminants in surface waters. Analytical and Bioanalytical Chemistry, 2020, 412, 4909-4919.	3.7	62
17	Aging of tire and road wear particles in terrestrial and freshwater environments â€“ A review on processes, testing, analysis and impact. Chemosphere, 2022, 288, 132467.	8.2	55
18	Organic Markers of Tire and Road Wear Particles in Sediments and Soils: Transformation Products of Major Antiozonants as Promising Candidates. Environmental Science & Technology, 2021, 55, 11723-11732.	10.0	50

#	Article	IF	Citations
19	Conditioning Film and Early Biofilm Succession on Plastic Surfaces. Environmental Science & Technology, 2021, 55, 11006-11018.	10.0	45
20	Characterization of Individual Tire and Road Wear Particles in Environmental Road Dust, Tunnel Dust, and Sediment. Environmental Science and Technology Letters, 2021, 8, 1057-1064.	8.7	39
21	Silver and gold nanoparticle separation using asymmetrical flow-field flow fractionation: Influence of run conditions and of particle and membrane charges. Journal of Chromatography A, 2016, 1440, 150-159.	3.7	38
22	Production of reference materials for the detection and size determination of silica nanoparticles in tomato soup. Analytical and Bioanalytical Chemistry, 2014, 406, 3895-907.	3.7	36
23	Feasibility of the development of reference materials for the detection of Ag nanoparticles in food: neat dispersions and spiked chicken meat. Accreditation and Quality Assurance, 2015, 20, 3-16.	0.8	33
24	Yolk Sac of Zebrafish Embryos as Backpack for Chemicals?. Environmental Science & Technology, 2020, 54, 10159-10169.	10.0	33
25	Agar agar-stabilized milled zerovalent iron particles for in situ groundwater remediation. Science of the Total Environment, 2016, 563-564, 713-723.	8.0	29
26	Physicochemical characterization of titanium dioxide pigments using various techniques for size determination and asymmetric flow field flow fractionation hyphenated with inductively coupled plasma mass spectrometry. Analytical and Bioanalytical Chemistry, 2016, 408, 6679-6691.	3.7	29
27	Identification of nanoparticles and their localization in algal biofilm by 3D-imaging secondary ion mass spectrometry. Journal of Analytical Atomic Spectrometry, 2019, 34, 1098-1108.	3.0	22
28	The diverse metal composition of plastic items and its implications. Science of the Total Environment, 2021, 764, 142870.	8.0	22
29	Accurate quantification of TiO2 nanoparticles in commercial sunscreens using standard materials and orthogonal particle sizing methods for verification. Talanta, 2020, 215, 120921.	5.5	21
30	Effect of field site hydrogeochemical conditions on the corrosion of milled zerovalent iron particles and their dechlorination efficiency. Science of the Total Environment, 2018, 618, 1619-1627.	8.0	20
31	A Large-Scale 3D Study on Transport of Humic Acid-Coated Goethite Nanoparticles for Aquifer Remediation. Water (Switzerland), 2020, 12, 1207.	2.7	20
32	Elemental imaging (LA-ICP-MS) of zebrafish embryos to study the toxicokinetics of the acetylcholinesterase inhibitor naled. Analytical and Bioanalytical Chemistry, 2019, 411, 617-627.	3.7	16
33	A uniform measurement expression for cross method comparison of nanoparticle aggregate size distributions. Analyst, The, 2015, 140, 5257-5267.	3.5	14
34	Long term performance of an AMD treatment bioreactor using chemolithoautotrophic sulfate reduction and ferrous iron precipitation under in situ groundwater conditions. Bioresource Technology, 2012, 104, 221-227.	9.6	13
35	Surfactant assisted extraction of incidental nanoparticles from road runoff sediment and their characterization by single particle-ICP-MS. Chemosphere, 2020, 246, 125765.	8.2	13
36	Accumulation of germanium (Ge) in plant tissues of grasses is not solely driven by its incorporation in phytoliths. Biogeochemistry, 2020, 148, 49-68.	3.5	12

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37	An investigation into LA-spICP-ToF-MS uses for <i>in situ</i> measurement of environmental multi-elemental nanoparticles. Journal of Analytical Atomic Spectrometry, 2021, 36, 2107-2115.	3.0	12
38	Measurement of number concentrations and sizes of Au nano-particles spiked into soil by laser ablation single particle ICPMS. Journal of Analytical Atomic Spectrometry, 2020, 35, 1678-1686.	3.0	11
39	Machine learning: our future spotlight into single-particle ICP-ToF-MS analysis. Journal of Analytical Atomic Spectrometry, 2021, 36, 2684-2694.	3.0	10
40	The impact of species, respiration type, growth phase and genetic inventory on absolute metal content of intact bacterial cells. Metallomics, 2019, 11, 925-935.	2.4	9
41	Determination of elemental distribution and evaluation of elemental concentration in single <i>Saccharomyces cerevisiae</i> cells using single cell-inductively coupled plasma mass spectrometry. Metallomics, 2021, 13, .	2.4	8
42	Intra-laboratory assessment of a method for the detection of TiO2 nanoparticles present in sunscreens based on multi-detector asymmetrical flow field-flow fractionation. NanoImpact, 2020, 19, 100233.	4.5	6
43	Direct analysis of fulvic acids adsorbed onto capped gold nanoparticles by laser desorption ionization Fourier-transform ion cyclotron resonance mass spectrometry. Environmental Science: Nano, 2021, 8, 2336-2346.	4.3	6
44	Testing In Situ Sulfate Reduction by H2 injection in a Bench-Scale Column Experiment. Water, Air, and Soil Pollution, 2009, 203, 109-122.	2.4	5
45	Characterization of membrane-bound metalloproteins in the anaerobic ammonium-oxidizing bacterium â€œCandidatus Kuenenia stuttgartiensisâ€•strain CSTR1. Talanta, 2021, 223, 121711.	5.5	5
46	Exploring the potential of laser desorption ionisation time-of-flight mass spectrometry to analyse organic capping agents on inorganic nanoparticle surfaces. Analytical and Bioanalytical Chemistry, 2020, 412, 5261-5271.	3.7	4
47	Effective processing and evaluation of chemical imaging data with respect to morphological features of the zebrafish embryo. Analytical and Bioanalytical Chemistry, 2021, 413, 1675-1687.	3.7	4
48	Challenges and current approaches toward environmental monitoring of nanomaterials. , 2021, , 73-108.		2
49	Surface cleaning and sample carrier for complementary high-resolution imaging techniques. Biointerphases, 2020, 15, 021005.	1.6	0
50	Zebrafish Oatp1d1 Acts as a Cellular Efflux Transporter of the Anionic Herbicide Bromoxynil. Chemical Research in Toxicology, 2022, , .	3.3	0