Martin Hassellöv

List of Publications by Year in descending order

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78 papers 10,126 citations

57758 44 h-index 79698 73 g-index

80 all docs 80 docs citations

80 times ranked 10079 citing authors

#	Article	IF	CITATIONS
1	Are We Speaking the Same Language? Recommendations for a Definition and Categorization Framework for Plastic Debris. Environmental Science & Environme	10.0	1,322
2	The ecotoxicology and chemistry of manufactured nanoparticles. Ecotoxicology, 2008, 17, 287-314.	2.4	774
3	Detection and characterization of engineered nanoparticles in food and the environment. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2008, 25, 795-821.	2.3	601
4	Nanoparticle analysis and characterization methodologies in environmental risk assessment of engineered nanoparticles. Ecotoxicology, 2008, 17, 344-361.	2.4	543
5	Outside the Safe Operating Space of the Planetary Boundary for Novel Entities. Environmental Science & Environmental Science	10.0	477
6	Screening for microplastics in sediment, water, marine invertebrates and fish: Method development and microplastic accumulation. Marine Pollution Bulletin, 2017, 122, 403-408.	5.0	359
7	Nanomaterials for environmental studies: Classification, reference material issues, and strategies for physico-chemical characterisation. Science of the Total Environment, 2010, 408, 1745-1754.	8.0	339
8	Considerations for environmental fate and ecotoxicity testing to support environmental risk assessments for engineered nanoparticles. Journal of Chromatography A, 2009, 1216, 503-509.	3.7	336
9	Microplastics in sub-surface waters of the Arctic Central Basin. Marine Pollution Bulletin, 2018, 130, 8-18.	5.0	295
10	Size Discrimination and Detection Capabilities of Single-Particle ICPMS for Environmental Analysis of Silver Nanoparticles. Analytical Chemistry, 2012, 84, 3965-3972.	6.5	258
11	Characterization of the effluent from a nanosilver producing washing machine. Environment International, 2011, 37, 1057-1062.	10.0	230
12	Competition between iron- and carbon-based colloidal carriers for trace metals in a freshwater assessed using flow field-flow fractionation coupled to ICPMS. Geochimica Et Cosmochimica Acta, 2003, 67, 3791-3802.	3.9	206
13	Silver nanoparticles and silver nitrate induce high toxicity to Pseudokirchneriella subcapitata, Daphnia magna and Danio rerio. Science of the Total Environment, 2014, 466-467, 232-241.	8.0	192
14	Rapid, high-precision potentiometric titration of alkalinity in ocean and sediment pore waters. Deep-Sea Research Part I: Oceanographic Research Papers, 1997, 44, 2031-2044.	1.4	184
15	Applications of particle-tracking analysis to the determination of size distributions and concentrations of nanoparticles in environmental, biological and food samples. TrAC - Trends in Analytical Chemistry, 2011, 30, 473-483.	11.4	183
16	Effects of silver and gold nanoparticles on rainbow trout (Oncorhynchus mykiss) hepatocytes. Aquatic Toxicology, 2010, 96, 44-52.	4.0	179
17	Iron Oxides as Geochemical Nanovectors for Metal Transport in Soil-River Systems. Elements, 2008, 4, 401-406.	0.5	176
18	Size and composition of colloidal organic matter and trace elements in the Mississippi River, Pearl River and the northern Gulf of Mexico, as characterized by flow field-flow fractionation. Marine Chemistry, 2010, 118, 119-128.	2.3	169

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19	The unaccountability case of plastic pellet pollution. Marine Pollution Bulletin, 2018, 129, 52-60.	5.0	156
20	Determination of Continuous Size and Trace Element Distribution of Colloidal Material in Natural Water by On-Line Coupling of Flow Field-Flow Fractionation with ICPMS. Analytical Chemistry, 1999, 71, 3497-3502.	6.5	155
21	Uptake and effects of manufactured silver nanoparticles in rainbow trout (Oncorhynchus mykiss) gill cells. Aquatic Toxicology, 2011, 101, 117-125.	4.0	151
22	Common Strategies and Technologies for the Ecosafety Assessment and Design of Nanomaterials Entering the Marine Environment. ACS Nano, 2014, 8, 9694-9709.	14.6	149
23	Changes in size distribution of fresh water nanoscale colloidal matter and associated elements on mixing with seawater. Geochimica Et Cosmochimica Acta, 2007, 71, 3292-3301.	3.9	130
24	Field-flow fractionation and inductively coupled plasma mass spectrometer coupling: History, development and applications. Journal of Analytical Atomic Spectrometry, 2010, 25, 613.	3.0	118
25	Surface charge and interfacial potential of titanium dioxide nanoparticles: Experimental and theoretical investigations. Journal of Colloid and Interface Science, 2013, 407, 168-176.	9.4	118
26	Challenges in Exposure Modeling of Nanoparticles in Aquatic Environments. Human and Ecological Risk Assessment (HERA), 2011, 17, 245-262.	3.4	115
27	High resolution ICPMS as an on-line detector for flow field-flow fractionation; multi-element determination of colloidal size distributions in a natural water sample. Analytica Chimica Acta, 2005, 535, 109-121.	5.4	113
28	Comparison between manta trawl and in situ pump filtration methods, and guidance for visual identification of microplastics in surface waters. Environmental Science and Pollution Research, 2020, 27, 5559-5571.	5.3	112
29	Progress towards the validation of modeled environmental concentrations of engineered nanomaterials by analytical measurements. Environmental Science: Nano, 2015, 2, 421-428.	4.3	110
30	Using FIFFF and aTEM to determine trace metal–nanoparticle associations in riverbed sediment. Environmental Chemistry, 2010, 7, 82.	1.5	97
31	Measurements of nanoparticle number concentrations and size distributions in contrasting aquatic environments using nanoparticle tracking analysis. Environmental Chemistry, 2010, 7, 67.	1.5	91
32	A signal deconvolution method to discriminate smaller nanoparticles in single particle ICP-MS. Journal of Analytical Atomic Spectrometry, 2014, 29, 134-144.	3.0	87
33	Intermethod comparison of the particle size distributions of colloidal silica nanoparticles. Science and Technology of Advanced Materials, 2014, 15, 035009.	6.1	84
34	An efficient and gentle enzymatic digestion protocol for the extraction of microplastics from bivalve tissue. Marine Pollution Bulletin, 2019, 142, 129-134.	5.0	83
35	The role of nanominerals and mineral nanoparticles in the transport of toxic trace metals: Field-flow fractionation and analytical TEM analyses after nanoparticle isolation and density separation. Geochimica Et Cosmochimica Acta, 2013, 102, 213-225.	3.9	82
36	Iron biogeochemistry across marine systems – progress from the past decade. Biogeosciences, 2010, 7, 1075-1097.	3.3	69

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37	Influence of thermooxidative degradation on the in situ fate of polyethylene in temperate coastal waters. Marine Pollution Bulletin, 2018, 135, 187-194.	5.0	64
38	Geographically distributed classification of surface water chemical parameters influencing fate and behavior of nanoparticles and colloid facilitated contaminant transport. Water Research, 2013, 47, 5350-5361.	11.3	63
39	Strategies for determining heteroaggregation attachment efficiencies of engineered nanoparticles in aquatic environments. Environmental Science: Nano, 2020, 7, 351-367.	4.3	59
40	Improving the accuracy of single particle ICPMS for measurement of size distributions and number concentrations of nanoparticles by determining analyte partitioning during nebulisation. Journal of Analytical Atomic Spectrometry, 2014, 29, 743-752.	3.0	58
41	Nanofibrils and other colloidal biopolymers binding trace elements in coastal seawater: Significance for variations in element size distributions. Limnology and Oceanography, 2010, 55, 187-202.	3.1	56
42	Optimisation of on-channel preconcentration in flow field-flow fractionation for the determination of size distributions of low molecular weight colloidal material in natural waters. Analytica Chimica Acta, 1997, 357, 187-196.	5.4	55
43	Influence of trace metal release from volcanic ash on growth of Thalassiosira pseudonana and Emiliania huxleyi. Marine Chemistry, 2012, 132-133, 28-33.	2.3	53
44	Influence of different types of natural organic matter on titania nanoparticle stability: effects of counter ion concentration and pH. Environmental Science: Nano, 2014, 1, 181-189.	4.3	51
45	Summer sea ice melt and wastewater are important local sources of microlitter to Svalbard waters. Environment International, 2020, 139, 105511.	10.0	49
46	Deep Learning for Reconstructing Low-Quality FTIR and Raman Spectra─A Case Study in Microplastic Analyses. Analytical Chemistry, 2021, 93, 16360-16368.	6. 5	46
47	Synthesis, characterization and particle size distribution of TiO2 colloidal nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 384, 254-261.	4.7	43
48	A new peak recognition algorithm for detection of ultra-small nano-particles by single particle ICP-MS using rapid time resolved data acquisition on a sector-field mass spectrometer. Journal of Analytical Atomic Spectrometry, 2015, 30, 1723-1729.	3.0	43
49	Dissolved iron (II) in the Baltic Sea surface water and implications for cyanobacterial bloom development. Biogeosciences, 2009, 6, 2397-2420.	3.3	38
50	Coagulation and sedimentation of gold nanoparticles and illite in model natural waters: Influence of initial particle concentration. NanoImpact, 2016, 3-4, 67-74.	4.5	38
51	Sedimentation Field-Flow Fractionation Coupled Online to Inductively Coupled Plasma Mass SpectrometryNew Possibilities for Studies of Trace Metal Adsorption onto Natural Colloids. Environmental Science & Technology, 1999, 33, 4528-4531.	10.0	36
52	Nanofragmentation of Expanded Polystyrene Under Simulated Environmental Weathering (Thermooxidative Degradation and Hydrodynamic Turbulence). Frontiers in Marine Science, 2021, 7, .	2.5	35
53	Effects of alginate on stability and ecotoxicity of nano-TiO2 in artificial seawater. Ecotoxicology and Environmental Safety, 2015, 117, 107-114.	6.0	31
54	Fractionation of iron species and iron isotopes in the Baltic Sea euphotic zone. Biogeosciences, 2010, 7, 2489-2508.	3.3	27

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55	Application of cross-flow ultrafiltration for the determination of colloidal abundances in suboxic ferrous-rich ground watersa~†. Science of the Total Environment, 2007, 372, 636-644.	8.0	26
56	Relative molar mass distributions of chromophoric colloidal organic matter in coastal seawater determined by Flow Field-Flow Fractionation with UV absorbance and fluorescence detection. Marine Chemistry, 2005, 94, 111-123.	2.3	25
57	Response to the Letter to the Editor Regarding Our Feature "Are We Speaking the Same Language? Recommendations for a Definition and Categorization Framework for Plastic Debris― Environmental Science & Technology, 2019, 53, 4678-4679.	10.0	25
58	Particle sources and transport in stratified Nordic coastal seas in the Anthropocene. Elementa, 2018, 6, .	3.2	25
59	Asymmetrical Flow Field Flow Fractionation - Multidetection System as a Tool for Studying Metal - Alginate Interactions. Environmental Chemistry, 2006, 3, 192.	1.5	24
60	Title is missing!. Aquatic Geochemistry, 2001, 7, 155-171.	1.3	23
61	Effects of silver nanoparticles on the freshwater snail <i>Physa acuta ⟨i⟩: The role of test media and snails' life cycle stage. Environmental Toxicology and Chemistry, 2017, 36, 243-253.</i>	4.3	23
62	Nanomaterial Fate in Seawater: A Rapid Sink or Intermittent Stabilization?. Frontiers in Environmental Science, 2020, 8, .	3.3	22
63	Colloidâ€Facilitated Metal Transport in Peat Filters. Water Environment Research, 2010, 82, 506-511.	2.7	21
64	Influence of salinity and organic matter on the toxicity of Cu to a brackish water and marine clone of the red macroalga Ceramium tenuicorne. Ecotoxicology and Environmental Safety, 2011, 74, 636-642.	6.0	21
65	Size dependence of silver nanoparticle removal in a wastewater treatment plant mesocosm measured by FAST single particle ICP-MS. Environmental Science: Nano, 2017, 4, 1189-1197.	4.3	20
66	Electrospray Mass Spectrometry as Online Detector for Low Molecular Weight Polymer Separations with Flow Field-Flow Fractionation. Journal of Liquid Chromatography and Related Technologies, 1997, 20, 2843-2856.	1.0	19
67	Characterisation of Aquatic Colloids and Macromolecules by Field-Flow Fractionation. , 2007, , 223-276.		18
68	Multimethod 3D characterization of natural plate-like nanoparticles: shape effects on equivalent size measurements. Journal of Nanoparticle Research, 2014, 16 , 1 .	1.9	18
69	Influence of organic molecules on the aggregation of TiO2 nanoparticles in acidic conditions. Journal of Nanoparticle Research, 2017, 19, 133.	1.9	18
70	TiO ₂ nanoparticle interactions with supported lipid membranes – an example of removal of membrane patches. RSC Advances, 2016, 6, 91102-91110.	3 . 6	13
71	In situ characterisation of physicochemical state and concentration of nanoparticles in soil ecotoxicity studies using environmental scanning electron microscopy. Environmental Chemistry, 2014, 11, 367.	1.5	12
72	Nonlinear Concentration Dependence of the Collective Diffusion Coefficient of TiO2 Nanoparticle Dispersions. Journal of Physical Chemistry C, 2011, 115, 13609-13616.	3.1	10

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73	Comment on "Trace Metal Levels in Uncontaminated Groundwater of a Coastal Watershed:Â Importance of Colloidal Forms― Environmental Science & Technology, 2003, 37, 657-658.	10.0	8
74	Microplastic Characterization by Infrared Spectroscopy. , 2020, , 1-33.		2
75	Progress towards monitoring of microlitter in Scandinavian marine environments. TemaNord, 2018, , .	1.3	2
76	Nanoparticle-Induced Holes in Model Membranes. Biophysical Journal, 2012, 102, 506a.	0.5	0
77	Detection Methods for Field-Flow Fractionation. , 2005, , 437-442.		0
78	Microplastic Characterization by Infrared Spectroscopy. , 2022, , 79-111.		O