Sebastian Primpke

List of Publications by Citations

41 papers	4,126 citations	22 h-index	43 g-index
43 ext. papers	5,710 ext. citations	7.4 avg, IF	6.3 L-index

#	Paper	IF	Citations
41	Identification of microplastic in effluents of waste water treatment plants using focal plane array-based micro-Fourier-transform infrared imaging. *Water Research*, **2017**, 108, 365-372	12.5	652
40	White and wonderful? Microplastics prevail in snow from the Alps to the Arctic. *Science Advances*, **2019**, 5, eaax1157	14.3	440
39	High Quantities of Microplastic in Arctic Deep-Sea Sediments from the HAUSGARTEN Observatory. *Environmental Science & Technology*, **2017**, 51, 11000-11010	10.3	434
38	Arctic sea ice is an important temporal sink and means of transport for microplastic. *Nature Communications*, **2018**, 9, 1505	17.4	431
37	Low numbers of microplastics detected in drinking water from ground water sources. *Science of the Total Environment*, **2019**, 648, 631-635	10.2	324
36	Enzymatic Purification of Microplastics in Environmental Samples. *Environmental Science & Technology*, **2017**, 51, 14283-14292	10.3	225
35	An automated approach for microplastics analysis using focal plane array (FPA) FTIR microscopy and image analysis. *Analytical Methods*, **2017**, 9, 1499-1511	3.2	224
34	Reference database design for the automated analysis of microplastic samples based on Fourier transform infrared (FTIR) spectroscopy. *Analytical and Bioanalytical Chemistry*, **2018**, 410, 5131-5141	4.4	159
33	Comparison of Raman and Fourier Transform Infrared Spectroscopy for the Quantification of Microplastics in the Aquatic Environment. *Environmental Science & Technology*, **2018**, 52, 13279-13288	10.3	143
32	Spatial distribution of microplastics in sediments and surface waters of the southern North Sea. *Environmental Pollution*, **2019**, 252, 1719-1729	9.3	121
31	Critical Assessment of Analytical Methods for the Harmonized and Cost-Efficient Analysis of Microplastics. *Applied Spectroscopy*, **2020**, 74, 1012-1047	3.1	97
30	Tying up Loose Ends of Microplastic Pollution in the Arctic: Distribution from the Sea Surface through the Water Column to Deep-Sea Sediments at the HAUSGARTEN Observatory. *Environmental Science & Technology*, **2020**, 54, 4079-4090	10.3	91
29	Microplastic Pollution in Benthic Midstream Sediments of the Rhine River. *Environmental Science & Technology*, **2019**, 53, 6053-6062	10.3	90
28	Different stories told by small and large microplastics in sediment - first report of microplastic concentrations in an urban recipient in Norway. *Marine Pollution Bulletin*, **2019**, 141, 501-513	6.7	83
27	Reporting Guidelines to Increase the Reproducibility and Comparability of Research on Microplastics. *Applied Spectroscopy*, **2020**, 74, 1066-1077	3.1	77
26	Automated identification and quantification of microfibres and microplastics. *Analytical Methods*, **2019**, 11, 2138-2147	3.2	66
25	A systems approach to understand microplastic occurrence and variability in Dutch riverine surface waters. *Water Research*, **2020**, 176, 115723	12.5	66

24	Toward the Systematic Identification of Microplastics in the Environment: Evaluation of a New Independent Software Tool (siMPle) for Spectroscopic Analysis. *Applied Spectroscopy*, **2020**, 74, 1127-1138	3.1	62
23	Critical Review of Processing and Classification Techniques for Images and Spectra in Microplastic Research. *Applied Spectroscopy*, **2020**, 74, 989-1010	3.1	57
22	Comparison of pyrolysis gas chromatography/mass spectrometry and hyperspectral FTIR imaging spectroscopy for the analysis of microplastics. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 8283-8298	4.4	44
21	Microplastic Spectral Classification Needs an Open Source Community: Open Specy to the Rescue!. *Analytical Chemistry*, **2021**, 93, 7543-7548	7.8	40
20	Library based identification and characterisation of polymers with nano-FTIR and IR-sSNOM imaging. *Analytical Methods*, **2019**, 11, 5195-5202	3.2	32
19	Bacterial biofilms colonizing plastics in estuarine waters, with an emphasis on Vibrio spp. and their antibacterial resistance. *PLoS ONE*, **2020**, 15, e0237704	3.7	22
18	Systematic identification of microplastics in abyssal and hadal sediments of the Kuril Kamchatka trench. *Environmental Pollution*, **2021**, 269, 116095	9.3	22
17	Flexible Microdomain Specific Staining of Block Copolymers for 3D Optical Nanoscopy. *Macromolecules*, **2011**, 44, 7508-7510	5.5	20
16	Mikroplastik in der Umwelt. *Chemie in Unserer Zeit*, **2017**, 51, 402-412	0.2	17
15	Diffusion of single molecular and macromolecular probes during the free radical bulk polymerization of MMA Towards a better understanding of the Trommsdorff effect on a molecular level. *Polymer Chemistry*, **2016**, 7, 4100-4105	4.9	16
14	Rapid Identification and Quantification of Microplastics in the Environment by Quantum Cascade Laser-Based Hyperspectral Infrared Chemical Imaging. *Environmental Science & Technology*, **2020**, 54, 15893-15903	10.3	16
13	Characterizing the multidimensionality of microplastics across environmental compartments. *Water Research*, **2021**, 202, 117429	12.5	11
12	Vast Quantities of Microplastics in Arctic Sea Ice A Prime Temporary Sink for Plastic Litter and a Medium of Transport **2017**, 75-76		9
11	Microplastic pollution in the Weser estuary and the German North Sea. *Environmental Pollution*, **2021**, 288, 117681	9.3	8
10	Microplastics in the Weddell Sea (Antarctica): A Forensic Approach for Discrimination between Environmental and Vessel-Induced Microplastics. *Environmental Science & Technology*, **2021**, 55, 15900-15911	10.3	6
9	Comparison and uncertainty evaluation of two centrifugal separators for microplastic sampling. *Journal of Hazardous Materials*, **2021**, 414, 125482	12.8	6
8	Mikroplastik in Binnengewässern **2017**, 1-35		3
7	Modeling of Catalyzed Chain Growth (CCG) Polymerization of Styrene-d8 using Cp*2ZrCl2 and Dibenzylmagnesium. *Macromolecular Theory and Simulations*, **2015**, 24, 232-247	1.5	3

6	7-Azacinnolin-4(1H)-one preparation and NMR studies of tautomery. *Journal of Heterocyclic Chemistry*, **2011**, 48, 737-741	1.9	3
5	Paraffin and other petroleum waxes in the southern North Sea. *Marine Pollution Bulletin*, **2021**, 162, 111807	8.7	3
4	A Kinetic Investigation of the Initialization of Catalyzed Chain Growth of Styrene: The Reaction of Cp*2ZrCl2 with Dibenzylmagnesium. *Macromolecular Chemistry and Physics*, **2014**, 215, 544-554	2.6	1
3	Microplastics in two German wastewater treatment plants: Year-long effluent analysis with FTIR and Py-GC/MS.. *Science of the Total Environment*, **2021**, 817, 152619	10.2	1
2	Human footprints at hadal depths: interlayer and intralayer comparison of sediment cores from the Kuril Kamchatka trench. *Science of the Total Environment*, **2022**, 838, 156035	10.2	0
1	Automated Analysis of µFTIR Imaging Data for Microplastic Samples **2017**, 90-91		