

# Tobias Schulze

## List of Publications by Year in descending order

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Version: 2024-02-01

75  
papers

4,116  
citations

125106

35  
h-index

134545

62  
g-index

83  
all docs

83  
docs citations

83  
times ranked

4785  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-target screening with high-resolution mass spectrometry: critical review using a collaborative trial on water analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 6237-6255.	1.9	489
2	Effect-directed analysis supporting monitoring of aquatic environments – An in-depth overview. <i>Science of the Total Environment</i> , 2016, 544, 1073-1118.	3.9	288
3	Identification of novel micropollutants in wastewater by a combination of suspect and nontarget screening. <i>Environmental Pollution</i> , 2014, 184, 25-32.	3.7	211
4	Impact of untreated wastewater on a major European river evaluated with a combination of in vitro bioassays and chemical analysis. <i>Environmental Pollution</i> , 2017, 220, 1220-1230.	3.7	169
5	Linking in Vitro Effects and Detected Organic Micropollutants in Surface Water Using Mixture-Toxicity Modeling. <i>Environmental Science &amp; Technology</i> , 2015, 49, 14614-14624.	4.6	164
6	Micropollutants in European rivers: A mode of action survey to support the development of effect-based tools for water monitoring. <i>Environmental Toxicology and Chemistry</i> , 2016, 35, 1887-1899.	2.2	161
7	European demonstration program on the effect-based and chemical identification and monitoring of organic pollutants in European surface waters. <i>Science of the Total Environment</i> , 2017, 601-602, 1849-1868.	3.9	151
8	Future water quality monitoring: improving the balance between exposure and toxicity assessments of real-world pollutant mixtures. <i>Environmental Sciences Europe</i> , 2019, 31, .	2.6	142
9	Pesticides are the dominant stressors for vulnerable insects in lowland streams. <i>Water Research</i> , 2021, 201, 117262.	5.3	118
10	How to confirm identified toxicants in effect-directed analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 1959-1973.	1.9	91
11	NORMAN digital sample freezing platform: A European virtual platform to exchange liquid chromatography high resolution-mass spectrometry data and screen suspects in “digitally frozen” environmental samples. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 115, 129-137.	5.8	89
12	Assessing contamination levels of Laguna Lake sediments (Philippines) using a contact assay with zebrafish ( <i>Danio rerio</i> ) embryos. <i>Science of the Total Environment</i> , 2005, 347, 254-271.	3.9	82
13	Development and Application of Liquid Chromatographic Retention Time Indices in HRMS-Based Suspect and Nontarget Screening. <i>Analytical Chemistry</i> , 2021, 93, 11601-11611.	3.2	79
14	Towards a holistic and solution-oriented monitoring of chemical status of European water bodies: how to support the EU strategy for a non-toxic environment?. <i>Environmental Sciences Europe</i> , 2018, 30, 33.	2.6	76
15	High-resolution mass spectrometry to complement monitoring and track emerging chemicals and pollution trends in European water resources. <i>Environmental Sciences Europe</i> , 2019, 31, .	2.6	74
16	Bioassay battery interlaboratory investigation of emerging contaminants in spiked water extracts – Towards the implementation of bioanalytical monitoring tools in water quality assessment and monitoring. <i>Water Research</i> , 2016, 104, 473-484.	5.3	71
17	Effect-based assessment of toxicity removal during wastewater treatment. <i>Water Research</i> , 2017, 126, 153-163.	5.3	71
18	Identification of a phytotoxic photo-transformation product of diclofenac using effect-directed analysis. <i>Environmental Pollution</i> , 2010, 158, 1461-1466.	3.7	69

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19	Assessing the Mixture Effects in <i>In Vitro</i> Bioassays of Chemicals Occurring in Small Agricultural Streams during Rain Events. <i>Environmental Science &amp; Technology</i> , 2020, 54, 8280-8290.	4.6	66
20	The metabolomics Toolbox in Bioconductor and beyond. <i>Metabolites</i> , 2019, 9, 200.	1.3	64
21	Assessment of a novel device for onsite integrative large-volume solid phase extraction of water samples to enable a comprehensive chemical and effect-based analysis. <i>Science of the Total Environment</i> , 2017, 581-582, 350-358.	3.9	63
22	SPLASH, a hashed identifier for mass spectra. <i>Nature Biotechnology</i> , 2016, 34, 1099-1101.	9.4	61
23	Consensus Structure Elucidation Combining GC/EI-MS, Structure Generation, and Calculated Properties. <i>Analytical Chemistry</i> , 2012, 84, 3287-3295.	3.2	57
24	Solid-phase extraction as sample preparation of water samples for cell-based and other <i>in vitro</i> bioassays. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 493-504.	1.7	53
25	Characterization and risk assessment of seasonal and weather dynamics in organic pollutant mixtures from discharge of a separate sewer system. <i>Water Research</i> , 2018, 135, 122-133.	5.3	53
26	A European proposal for quality control and quality assurance of tandem mass spectral libraries. <i>Environmental Sciences Europe</i> , 2020, 32, .	2.6	53
27	The German Environmental Specimen Bank. <i>Journal of Soils and Sediments</i> , 2007, 7, 361-367.	1.5	52
28	Unraveling longitudinal pollution patterns of organic micropollutants in a river by non-target screening and cluster analysis. <i>Science of the Total Environment</i> , 2020, 727, 138388.	3.9	50
29	The NORMAN Association and the European Partnership for Chemicals Risk Assessment (PARC): let's cooperate!. <i>Environmental Sciences Europe</i> , 2020, 32, .	2.6	46
30	Mutagenicity in Surface Waters: Synergistic Effects of Carboline Alkaloids and Aromatic Amines. <i>Environmental Science &amp; Technology</i> , 2017, 51, 1830-1839.	4.6	45
31	Bioavailability in effect-directed analysis of organic toxicants in sediments. <i>TrAC - Trends in Analytical Chemistry</i> , 2009, 28, 543-549.	5.8	41
32	Screening of Pesticide and Biocide Patterns As Risk Drivers in Sediments of Major European River Mouths: Ubiquitous or River Basin-Specific Contamination?. <i>Environmental Science &amp; Technology</i> , 2018, 52, 2251-2260.	4.6	41
33	Endocrine disrupting, mutagenic, and teratogenic effects of upper Danube River sediments using effect-directed analysis. <i>Environmental Toxicology and Chemistry</i> , 2012, 31, 1053-1062.	2.2	40
34	Prioritising site-specific micropollutants in surface water from LC-HRMS non-target screening data using a rarity score. <i>Environmental Sciences Europe</i> , 2019, 31, .	2.6	39
35	A risk based assessment approach for chemical mixtures from wastewater treatment plant effluents. <i>Environment International</i> , 2022, 164, 107234.	4.8	38
36	Effect-directed analysis of contaminated sediment from the wastewater canal in Pancevo industrial area, Serbia. <i>Chemosphere</i> , 2009, 77, 907-913.	4.2	37

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37	Impact of contaminants bound to suspended particulate matter in the context of flood events. <i>Journal of Soils and Sediments</i> , 2010, 10, 1174-1185.	1.5	36
38	Identification and evaluation of cyp1a transcript expression in fish as molecular biomarker for petroleum contamination in tropical fresh water ecosystems. <i>Aquatic Toxicology</i> , 2011, 103, 46-52.	1.9	36
39	Identification and quantitative confirmation of dinitropyrenes and 3-nitrobenzanthrone as major mutagens in contaminated sediments. <i>Environment International</i> , 2012, 44, 31-39.	4.8	35
40	Tox-Box: securing drops of life - an enhanced health-related approach for risk assessment of drinking water in Germany. <i>Environmental Sciences Europe</i> , 2013, 25, .	2.6	30
41	Investigation on soil contamination at recently inundated and non-inundated sites. <i>Journal of Soils and Sediments</i> , 2011, 11, 82-92.	1.5	28
42	The risk of altering soil and sediment samples upon extract preparation for analytical and bio-analytical investigations—a review. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 1975-1985.	1.9	27
43	Accelerated membrane-assisted clean-up as a tool for the clean-up of extracts from biological tissues. <i>Journal of Chromatography A</i> , 2008, 1196-1197, 33-40.	1.8	26
44	NFDI4Chem - Towards a National Research Data Infrastructure for Chemistry in Germany. <i>Research Ideas and Outcomes</i> , 0, 6, .	1.0	25
45	A sediment extraction and cleanup method for wide-scope multitarget screening by liquid chromatography—high-resolution mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 177-188.	1.9	24
46	Performance of combined fragmentation and retention prediction for the identification of organic micropollutants by LC-HRMS. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 1931-1941.	1.9	22
47	Optimization of LC-Orbitrap-HRMS acquisition and MZmine 2 data processing for nontarget screening of environmental samples using design of experiments. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 7905-7915.	1.9	20
48	Application of the Sea Urchin Embryo Test in Toxicity Evaluation and Effect-Directed Analysis of Wastewater Treatment Plant Effluents. <i>Environmental Science &amp; Technology</i> , 2020, 54, 8890-8899.	4.6	19
49	Evaluation of the hazard potentials of river suspended particulate matter and floodplain soils in the Rhine basin using chemical analysis and in vitro bioassays. <i>Environmental Science and Pollution Research</i> , 2015, 22, 14606-14620.	2.7	16
50	Evidence for antifouling biocides as one of the limiting factors for the recovery of macrophyte communities in lakes of Schleswig-Holstein. <i>Environmental Sciences Europe</i> , 2021, 33, .	2.6	16
51	Microbial reporter gene assay as a diagnostic and early warning tool for the detection and characterization of toxic pollution in surface waters. <i>Environmental Toxicology and Chemistry</i> , 2015, 34, 2523-2532.	2.2	15
52	Estrogen receptor mediated activity in bankside groundwater, with flood suspended particulate matter and floodplain soil — An approach combining tracer substance, bioassay and target analysis. <i>Chemosphere</i> , 2011, 85, 717-723.	4.2	14
53	Occurrence of plant secondary metabolite fingerprints in river waters from Eastern Jutland, Denmark. <i>Environmental Sciences Europe</i> , 2021, 33, .	2.6	14
54	EDA-EMERGE: an FP7 initial training network to equip the next generation of young scientists with the skills to address the complexity of environmental contamination with emerging pollutants. <i>Environmental Sciences Europe</i> , 2013, 25, .	2.6	13

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55	Establish data infrastructure to compile and exchange environmental screening data on a European scale. <i>Environmental Sciences Europe</i> , 2019, 31, .	2.6	13
56	A Data Set of 255,000 Randomly Selected and Manually Classified Extracted Ion Chromatograms for Evaluation of Peak Detection Methods. <i>Metabolites</i> , 2020, 10, 162.	1.3	12
57	Decoding and Discrimination of Chemical Cues and Signals: Avoidance of Predation and Competition during Parental Care Behavior in Sympatric Poison Frogs. <i>PLoS ONE</i> , 2015, 10, e0129929.	1.1	12
58	Use of factorial design for the multivariate optimization of polypropylene membranes for the cleanup of environmental samples using the accelerated membrane-assisted cleanup approach. <i>Journal of Chromatography A</i> , 2012, 1225, 26-36.	1.8	11
59	Looking back - Looking forward: A novel multi-time slice weight-of-evidence approach for defining reference conditions to assess the impact of human activities on lake systems. <i>Science of the Total Environment</i> , 2018, 626, 1036-1046.	3.9	9
60	Improving the Screening Analysis of Pesticide Metabolites in Human Biomonitoring by Combining High-Throughput <i>In Vitro</i> Incubation and Automated LC-MS/MS Data Processing. <i>Analytical Chemistry</i> , 2021, 93, 9149-9157.	3.2	9
61	Complex chemical cocktail, containing insecticides diazinon and permethrin, drives acute toxicity to crustaceans in mountain lakes. <i>Science of the Total Environment</i> , 2022, 828, 154456.	3.9	9
62	Comparison of different exhaustive and biomimetic extraction techniques for chemical and biological analysis of polycyclic aromatic compounds in river sediments. <i>Journal of Soils and Sediments</i> , 2012, 12, 1419-1434.	1.5	8
63	Measuring the internal concentration of volatile organic compounds in small organisms using micro-QuEChERS coupled to LVI-MS/MS. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 6041-6052.	1.9	8
64	Estrogenic activity of surface waters using zebrafish- and human-based in vitro assays: The Danube as a case-study. <i>Environmental Toxicology and Pharmacology</i> , 2020, 78, 103401.	2.0	8
65	Reduced genetic diversity of freshwater amphipods in rivers with increased levels of anthropogenic organic micropollutants. <i>Evolutionary Applications</i> , 2022, 15, 976-991.	1.5	7
66	Symbolic Aggregate Approximation Improves Gap Filling in High-Resolution Mass Spectrometry Data Processing. <i>Analytical Chemistry</i> , 2020, 92, 10425-10432.	3.2	6
67	Lagrangian profiles of riverine autotrophy, organic matter transformation, and micropollutants at extreme drought. <i>Science of the Total Environment</i> , 2022, 828, 154243.	3.9	6
68	The impact of chemosensitisation on bioaccumulation and sediment toxicity. <i>Chemosphere</i> , 2017, 186, 652-659.	4.2	5
69	In silico deconjugation of glucuronide conjugates enhances tandem mass spectra library annotation of human samples. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 2629.	1.9	5
70	Sources and Fate of the Antiandrogenic Fluorescent Dye 4-Methyl-7-Diethylaminocoumarin in Small River Systems. <i>Environmental Toxicology and Chemistry</i> , 2021, 40, 3078-3091.	2.2	4
71	Demonstration of an aggregated biomarker response approach to assess the impact of point and diffuse contaminant sources in feral fish in a small river case study. <i>Science of the Total Environment</i> , 2022, 804, 150020.	3.9	4
72	Data format standards in analytical chemistry. <i>Pure and Applied Chemistry</i> , 2022, 94, 725-736.	0.9	4

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73	ELIXIR and Toxicology: a community in development. F1000Research, 0, 10, 1129.	0.8	3
74	Computer Tools for Structure Elucidation in Effect-Directed Analysis. Handbook of Environmental Chemistry, 2011, , 167-198.	0.2	1
75	Mutagenicity of the Danube River: The contribution of liquid phase and particulate suspended matter. Environmental and Molecular Mutagenesis, 2022, , .	0.9	0