Tobias Schulze

List of Publications by Year
in descending order

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75	4,116	109321	118850
papers	citations	35 h-index	62 g-index

83	83	83	4360
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Non-target screening with high-resolution mass spectrometry: critical review using a collaborative trial on water analysis. Analytical and Bioanalytical Chemistry, 2015, 407, 6237-6255.	3.7	489
2	Effect-directed analysis supporting monitoring of aquatic environments â€" An in-depth overview. Science of the Total Environment, 2016, 544, 1073-1118.	8.0	288
3	Identification of novel micropollutants in wastewater by a combination of suspect and nontarget screening. Environmental Pollution, 2014, 184, 25-32.	7.5	211
4	Impact of untreated wastewater on a major European river evaluated with a combination of inÂvitro bioassays and chemical analysis. Environmental Pollution, 2017, 220, 1220-1230.	7.5	169
5	Linking in Vitro Effects and Detected Organic Micropollutants in Surface Water Using Mixture-Toxicity Modeling. Environmental Science & Technology, 2015, 49, 14614-14624.	10.0	164
6	Micropollutants in European rivers: A mode of action survey to support the development of effectâ€based tools for water monitoring. Environmental Toxicology and Chemistry, 2016, 35, 1887-1899.	4.3	161
7	European demonstration program on the effect-based and chemical identification and monitoring of organic pollutants in European surface waters. Science of the Total Environment, 2017, 601-602, 1849-1868.	8.0	151
8	Future water quality monitoring: improving the balance between exposure and toxicity assessments of real-world pollutant mixtures. Environmental Sciences Europe, 2019, 31, .	5.5	142
9	Pesticides are the dominant stressors for vulnerable insects in lowland streams. Water Research, 2021, 201, 117262.	11.3	118
10	How to confirm identified toxicants in effect-directed analysis. Analytical and Bioanalytical Chemistry, 2008, 390, 1959-1973.	3.7	91
11	NORMAN digital sample freezing platform: A European virtual platform to exchange liquid chromatography high resolution-mass spectrometry data and screen suspects in â€œdigitally frozenâ€• environmental samples. TrAC - Trends in Analytical Chemistry, 2019, 115, 129-137.	11.4	89
12	Assessing contamination levels of Laguna Lake sediments (Philippines) using a contact assay with zebrafish (Danio rerio) embryos. Science of the Total Environment, 2005, 347, 254-271.	8.0	82
13	Development and Application of Liquid Chromatographic Retention Time Indices in HRMS-Based Suspect and Nontarget Screening. Analytical Chemistry, 2021, 93, 11601-11611.	6.5	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?. Environmental Sciences Europe, 2018, 30, 33.	5.5	76
15	High-resolution mass spectrometry to complement monitoring and track emerging chemicals and pollution trends in European water resources. Environmental Sciences Europe, 2019, 31, .	5.5	74
16	Bioassay battery interlaboratory investigation of emerging contaminants in spiked water extracts â€" Towards the implementation of bioanalytical monitoring tools in water quality assessment and monitoring. Water Research, 2016, 104, 473-484.	11.3	71
17	Effect-based assessment of toxicity removal during wastewater treatment. Water Research, 2017, 126, 153-163.	11.3	71
18	Identification of a phytotoxic photo-transformation product of diclofenac using effect-directed analysis. Environmental Pollution, 2010, 158, 1461-1466.	7.5	69

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19	Assessing the Mixture Effects in In Vitro Bioassays of Chemicals Occurring in Small Agricultural Streams during Rain Events. Environmental Science & Technology, 2020, 54, 8280-8290.	10.0	66
20	The metaRbolomics Toolbox in Bioconductor and beyond. Metabolites, 2019, 9, 200.	2.9	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. Science of the Total Environment, 2017, 581-582, 350-358.	8.0	63
22	SPLASH, a hashed identifier for mass spectra. Nature Biotechnology, 2016, 34, 1099-1101.	17.5	61
23	Consensus Structure Elucidation Combining GC/EI-MS, Structure Generation, and Calculated Properties. Analytical Chemistry, 2012, 84, 3287-3295.	6.5	57
24	Solid-phase extraction as sample preparation of water samples for cell-based and otherin vitrobioassays. Environmental Sciences: Processes and Impacts, 2018, 20, 493-504.	3.5	53
25	Characterization and risk assessment of seasonal and weather dynamics in organic pollutant mixtures from discharge of a separate sewer system. Water Research, 2018, 135, 122-133.	11.3	53
26	A European proposal for quality control and quality assurance of tandem mass spectral libraries. Environmental Sciences Europe, 2020, 32, .	5.5	53
27	The German Environmental Specimen Bank. Journal of Soils and Sediments, 2007, 7, 361-367.	3.0	52
28	Unraveling longitudinal pollution patterns of organic micropollutants in a river by non-target screening and cluster analysis. Science of the Total Environment, 2020, 727, 138388.	8.0	50
29	The NORMAN Association and the European Partnership for Chemicals Risk Assessment (PARC): letâ€™s cooperate!. Environmental Sciences Europe, 2020, 32, .	5.5	46
30	Mutagenicity in Surface Waters: Synergistic Effects of Carboline Alkaloids and Aromatic Amines. Environmental Science & Technology, 2017, 51, 1830-1839.	10.0	45
31	Bioavailability in effect-directed analysis of organic toxicants in sediments. TrAC - Trends in Analytical Chemistry, 2009, 28, 543-549.	11.4	41
32	Screening of Pesticide and Biocide Patterns As Risk Drivers in Sediments of Major European River Mouths: Ubiquitous or River Basin-Specific Contamination?. Environmental Science & Technology, 2018, 52, 2251-2260.	10.0	41
33	Endocrine disrupting, mutagenic, and teratogenic effects of upper Danube River sediments using effectâ€directed analysis. Environmental Toxicology and Chemistry, 2012, 31, 1053-1062.	4.3	40
34	Prioritising site-specific micropollutants in surface water from LC-HRMS non-target screening data using a rarity score. Environmental Sciences Europe, 2019, 31, .	5.5	39
35	A risk based assessment approach for chemical mixtures from wastewater treatment plant effluents. Environment International, 2022, 164, 107234.	10.0	38
36	Effect-directed analysis of contaminated sediment from the wastewater canal in Pancevo industrial area, Serbia. Chemosphere, 2009, 77, 907-913.	8.2	37

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37	Impact of contaminants bound to suspended particulate matter in the context of flood events. Journal of Soils and Sediments, 2010, 10, 1174-1185.	3.0	36
38	Identification and evaluation of cyp1a transcript expression in fish as molecular biomarker for petroleum contamination in tropical fresh water ecosystems. Aquatic Toxicology, 2011, 103, 46-52.	4.0	36
39	Identification and quantitative confirmation of dinitropyrenes and 3-nitrobenzanthrone as major mutagens in contaminated sediments. Environment International, 2012, 44, 31-39.	10.0	35
40	Tox-Box: securing drops of life - an enhanced health-related approach for risk assessment of drinking water in Germany. Environmental Sciences Europe, 2013, 25, .	5.5	30
41	Investigation on soil contamination at recently inundated and non-inundated sites. Journal of Soils and Sediments, 2011, 11, 82-92.	3.0	28
42	The risk of altering soil and sediment samples upon extract preparation for analytical and bio-analytical investigationsâ€"a review. Analytical and Bioanalytical Chemistry, 2008, 390, 1975-1985.	3.7	27
43	Accelerated membrane-assisted clean-up as a tool for the clean-up of extracts from biological tissues. Journal of Chromatography A, 2008, 1196-1197, 33-40.	3.7	26
44	NFDI4Chem - Towards a National Research Data Infrastructure for Chemistry in Germany. Research Ideas and Outcomes, 0, 6, .	1.0	25
45	A sediment extraction and cleanup method for wide-scope multitarget screening by liquid chromatographyâ€"high-resolution mass spectrometry. Analytical and Bioanalytical Chemistry, 2018, 410, 177-188.	3.7	24
46	Performance of combined fragmentation and retention prediction for the identification of organic micropollutants by LC-HRMS. Analytical and Bioanalytical Chemistry, 2018, 410, 1931-1941.	3.7	22
47	Optimization of LC-Orbitrap-HRMS acquisition and MZmine 2 data processing for nontarget screening of environmental samples using design of experiments. Analytical and Bioanalytical Chemistry, 2016, 408, 7905-7915.	3.7	20
48	Application of the Sea Urchin Embryo Test in Toxicity Evaluation and Effect-Directed Analysis of Wastewater Treatment Plant Effluents. Environmental Science & Technology, 2020, 54, 8890-8899.	10.0	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. Environmental Science and Pollution Research, 2015, 22, 14606-14620.	5.3	16
50	Evidence for antifouling biocides as one of the limiting factors for the recovery of macrophyte communities in lakes of Schleswig-Holstein. Environmental Sciences Europe, 2021, 33, .	5.5	16
51	Microbial reporter gene assay as a diagnostic and early warning tool for the detection and characterization of toxic pollution in surface waters. Environmental Toxicology and Chemistry, 2015, 34, 2523-2532.	4.3	15
52	Estrogen receptor mediated activity in bankside groundwater, with flood suspended particulate matter and floodplain soil â€" An approach combining tracer substance, bioassay and target analysis. Chemosphere, 2011, 85, 717-723.	8.2	14
53	Occurrence of plant secondary metabolite fingerprints in river waters from Eastern Jutland, Denmark. Environmental Sciences Europe, 2021, 33, .	5.5	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. Environmental Sciences Europe, 2013, 25, .	5.5	13

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55	Establish data infrastructure to compile and exchange environmental screening data on a European scale. Environmental Sciences Europe, 2019, 31, .	5.5	13
56	A Data Set of 255,000 Randomly Selected and Manually Classified Extracted Ion Chromatograms for Evaluation of Peak Detection Methods. Metabolites, 2020, 10, 162.	2.9	12
57	Decoding and Discrimination of Chemical Cues and Signals: Avoidance of Predation and Competition during Parental Care Behavior in Sympatric Poison Frogs. PLoS ONE, 2015, 10, e0129929.	2.5	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. Journal of Chromatography A, 2012, 1225, 26-36.	3.7	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. Science of the Total Environment, 2018, 626, 1036-1046.	8.0	9
60	Improving the Screening Analysis of Pesticide Metabolites in Human Biomonitoring by Combining High-Throughput In Vitro Incubation and Automated LCâ€“HRMS Data Processing. Analytical Chemistry, 2021, 93, 9149-9157.	6.5	9
61	Complex chemical cocktail, containing insecticides diazinon and permethrin, drives acute toxicity to crustaceans in mountain lakes. Science of the Total Environment, 2022, 828, 154456.	8.0	9
62	Comparison of different exhaustive and biomimetic extraction techniques for chemical and biological analysis of polycyclic aromatic compounds in river sediments. Journal of Soils and Sediments, 2012, 12, 1419-1434.	3.0	8
63	Measuring the internal concentration of volatile organic compounds in small organisms using micro-QuEChERS coupled to LVIâ€“GCâ€“MS/MS. Analytical and Bioanalytical Chemistry, 2017, 409, 6041-6052.	3.7	8
64	Estrogenic activity of surface waters using zebrafish- and human-based in vitro assays: The Danube as a case-study. Environmental Toxicology and Pharmacology, 2020, 78, 103401.	4.0	8
65	Reduced genetic diversity of freshwater amphipods in rivers with increased levels of anthropogenic organic micropollutants. Evolutionary Applications, 2022, 15, 976-991.	3.1	7
66	Symbolic Aggregate Approximation Improves Gap Filling in High-Resolution Mass Spectrometry Data Processing. Analytical Chemistry, 2020, 92, 10425-10432.	6.5	6
67	Lagrangian profiles of riverine autotrophy, organic matter transformation, and micropollutants at extreme drought. Science of the Total Environment, 2022, 828, 154243.	8.0	6
68	The impact of chemosensitisation on bioaccumulation and sediment toxicity. Chemosphere, 2017, 186, 652-659.	8.2	5
69	In silico deconjugation of glucuronide conjugates enhances tandem mass spectra library annotation of human samples. Analytical and Bioanalytical Chemistry, 2022, 414, 2629.	3.7	5
70	Sources and Fate of the Antiandrogenic Fluorescent Dye 4â€Methylâ€7â€Diethylaminocoumarin in Small River Systems. Environmental Toxicology and Chemistry, 2021, 40, 3078-3091.	4.3	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. Science of the Total Environment, 2022, 804, 150020.	8.0	4
72	Data format standards in analytical chemistry. Pure and Applied Chemistry, 2022, 94, 725-736.	1.9	4

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73	ELIXIR and Toxicology: a community in development. F1000Research, 0, 10, 1129.	1.6	3
74	Computer Tools for Structure Elucidation in Effect-Directed Analysis. Handbook of Environmental Chemistry, 2011, , 167-198.	0.4	1
75	Mutagenicity of the Danube River: The contribution of liquid phase and particulate suspended matter. Environmental and Molecular Mutagenesis, 2022, , .	2.2	0