Mechthild Schmitt-Jansen

List of Publications by Year
in descending order

59 papers	4,099 citations	201385 27 h-index	138251 58 g-index
61 all docs	61 docs citations	61 times ranked	4672 citing authors

#	Article	IF	Citations
1	Impacts of Biofilm Formation on the Fate and Potential Effects of Microplastic in the Aquatic Environment. Environmental Science and Technology Letters, 2017, 4, 258-267.	3.9	881
2	Reducing Uncertainty and Confronting Ignorance about the Possible Impacts of Weathering Plastic in the Marine Environment. Environmental Science and Technology Letters, 2017, 4, 85-90.	3.9	372
3	Monitoring the effect of chemicals on biological communities. The biofilm as an interface. Analytical and Bioanalytical Chemistry, 2007, 387, 1425-1434.	1.9	341
4	Photostability and phytotoxicity of selected sunscreen agents and their degradation mixtures in water. Analytical and Bioanalytical Chemistry, 2009, 395, 1513-1524.	1.9	172
5	Weathering Plastics as a Planetary Boundary Threat: Exposure, Fate, and Hazards. Environmental Science & Technology, 2021, 55, 7246-7255.	4.6	152
6	Mixture Toxicity Revisited from a Toxicogenomic Perspective. Environmental Science & Technology, 2012, 46, 2508-2522.	4.6	135
7	Phytotoxicity assessment of diclofenac and its phototransformation products. Analytical and Bioanalytical Chemistry, 2007, 387, 1389-1396.	1.9	129
8	Pesticides are the dominant stressors for vulnerable insects in lowland streams. Water Research, 2021, 201, 117262.	5.3	118
9	An ecological perspective in aquatic ecotoxicology: Approaches and challenges. Basic and Applied Ecology, 2008, 9, 337-345.	1.2	104
10	What contributes to the sensitivity of microalgae to triclosan?. Aquatic Toxicology, 2008, 90, 102-108.	1.9	103
11	How to confirm identified toxicants in effect-directed analysis. Analytical and Bioanalytical Chemistry, 2008, 390, 1959-1973.	1.9	91
12	Pollutionâ€induced community tolerance (<scp>PICT</scp>): towards an ecologically relevant risk assessment of chemicals in aquatic systems. Freshwater Biology, 2016, 61, 2141-2151.	1.2	86
13	Community-level microalgal toxicity assessment by multiwavelength-excitation PAM fluorometry. Aquatic Toxicology, 2008, 86, 49-58.	1.9	82
14	Pollutionâ€induced community tolerance as a measure of species interaction in toxicity assessment. Journal of Applied Ecology, 2008, 45, 1514-1522.	1.9	80
15	PREDICTING AND OBSERVING RESPONSES OF ALGAL COMMUNITIES TO PHOTOSYSTEM IIâ€“HERBICIDE EXPOSURE USING POLLUTION-INDUCED COMMUNITY TOLERANCE AND SPECIES-SENSITIVITY DISTRIBUTIONS. Environmental Toxicology and Chemistry, 2005, 24, 304.	2.2	78
16	MODELKEY. Models for assessing and forecasting the impact of environmental key pollutants on freshwater and marine ecosystems and biodiversity (5 pp). Environmental Science and Pollution Research, 2005, 12, 252-256.	2.7	76
17	Toxic effects of isoproturon on periphyton communities â€“ a microcosm study. Estuarine, Coastal and Shelf Science, 2005, 62, 539-545.	0.9	76
18	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.	2.6	76

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19	Triclosanâ€"the forgotten priority substance?. Environmental Science and Pollution Research, 2012, 19, 585-591.	2.7	71
20	Identification of a phytotoxic photo-transformation product of diclofenac using effect-directed analysis. Environmental Pollution, 2010, 158, 1461-1466.	3.7	69
21	Active bio-monitoring of contamination in aquatic systemsâ€"An in situ translocation experiment applying the PICT concept. Aquatic Toxicology, 2011, 101, 228-236.	1.9	54
22	From the sea to the laboratory: Characterization of microplastic as prerequisite for the assessment of ecotoxicological impact. Integrated Environmental Assessment and Management, 2017, 13, 500-504.	1.6	50
23	Conditioning Film and Early Biofilm Succession on Plastic Surfaces. Environmental Science & Technology, 2021, 55, 11006-11018.	4.6	45
24	FLOW CYTOMETRY AS A TOOL TO STUDY PHYTOTOXIC MODES OF ACTION. Environmental Toxicology and Chemistry, 2007, 26, 297.	2.2	44
25	Alginate/silica hybrid materials for immobilization of green microalgae Chlorella vulgaris for cell-based sensor arrays. Journal of Materials Chemistry B, 2014, 2, 7896-7909.	2.9	44
26	A metabolomics approach to assessing phytotoxic effects on the green alga Scenedesmus vacuolatus. Metabolomics, 2009, 5, 59-71.	1.4	39
27	DRomics: A Turnkey Tool to Support the Use of the Doseâ€"Response Framework for Omics Data in Ecological Risk Assessment. Environmental Science & Technology, 2018, 52, 14461-14468.	4.6	37
28	Resilience trinity: safeguarding ecosystem functioning and services across three different time horizons and decision contexts. Oikos, 2020, 129, 445-456.	1.2	33
29	Multiple stressors in periphyton â€" comparison of observed and predicted tolerance responses to high ionic loads and herbicide exposure. Journal of Applied Ecology, 2013, 50, 1459-1468.	1.9	28
30	Metabolic Effect Level Index Links Multivariate Metabolic Fingerprints to Ecotoxicological Effect Assessment. Environmental Science & Technology, 2015, 49, 8096-8104.	4.6	27
31	A multi-omics concentration-response framework uncovers novel understanding of triclosan effects in the chlorophyte Scenedesmus vacuolatus. Journal of Hazardous Materials, 2020, 397, 122727.	6.5	25
32	Proposal for applying a component-based mixture approach for ecotoxicological assessment of fracturing fluids. Environmental Earth Sciences, 2013, 70, 3907-3920.	1.3	24
33	Disentangling multiple chemical and non-chemical stressors in a lotic ecosystem using a longitudinal approach. Science of the Total Environment, 2021, 769, 144324.	3.9	24
34	Effects of leachates from UV-weathered microplastic on the microalgae Scenedesmus vacuolatus. Analytical and Bioanalytical Chemistry, 2022, 414, 1469-1479.	1.9	24
35	In situ cage experiments with Potamopyrgus antipodarumâ€"A novel tool for real life exposure assessment in freshwater ecosystems. Ecotoxicology and Environmental Safety, 2010, 73, 1574-1579.	2.9	22
36	In-situ treatment of herbicide-contaminated groundwaterâ€"Feasibility study for the cases atrazine and bromacil using two novel nanoremediation-type materials. Journal of Hazardous Materials, 2020, 393, 122470.	6.5	22

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37	The use of pulse-amplitude modulated (PAM) fluorescence-based methods to evaluate effects of herbicides in microalgal systems of different complexity. Toxicological and Environmental Chemistry, 2007, 89, 665-681.	0.6	21
38	Bioassays with Unicellular Algae: Deviations from Exponential Growth and Its Implications for Toxicity Test Results. Journal of Environmental Quality, 2008, 37, 16-21.	1.0	20
39	Disentangling the direct and indirect effects of agricultural runoff on freshwater ecosystems subject to global warming: A microcosm study. Water Research, 2021, 190, 116713.	5.3	20
40	The Use of Photosynthetic Fluorescence Parameters from Autotrophic Biofilms for Monitoring the Effect of Chemicals in River Ecosystems. Handbook of Environmental Chemistry, 2012, , 85-115.	0.2	20
41	Flow cytometry as a diagnostic tool for the effects of polyphenolic allelochemicals on phytoplankton. Aquatic Botany, 2013, 104, 5-14.	0.8	19
42	Pollution-Induced Community Tolerance To Diagnose Hazardous Chemicals in Multiple Contaminated Aquatic Systems. Environmental Science & Technology, 2015, 49, 10048-10056.	4.6	16
43	Hydrodynamics Alter the Tolerance of Autotrophic Biofilm Communities Toward Herbicides. Frontiers in Microbiology, 2018, 9, 2884.	1.5	16
44	Multiple-stressor exposure of aquatic food webs: Nitrate and warming modulate the effect of pesticides. Water Research, 2022, 216, 118325.	5.3	14
45	Anchoring metabolic changes to phenotypic effects in the chlorophyte Scenedesmus vacuolatus under chemical exposure. Marine Environmental Research, 2010, 69, S28-S30.	1.1	13
46	The response of macroinvertebrate community taxa and functional groups to pollution along a heavily impacted river in Central Europe (BÃłina River, Czech Republic). Biologia (Poland), 2012, 67, 180-199.	0.8	12
47	Warming lowers critical thresholds for multiple stressorâ€“induced shifts between aquatic primary producers. Science of the Total Environment, 2022, 838, 156511.	3.9	12
48	Advances in the Multibiomarker Approach for Risk Assessment in Aquatic Ecosystems. Handbook of Environmental Chemistry, 2012, , 147-179.	0.2	11
49	Streamside mobile mesocosms (MOBICOS): A new modular research infrastructure for hydroâ€ecological process studies across catchmentâ€scale gradients. International Review of Hydrobiology, 2020, 105, 63-73.	0.5	11
50	Interâ€laboratory trial of a standardized sediment contact test with the aquatic plant <i>Myriophyllum aquaticum</i> (ISO 16191). Environmental Toxicology and Chemistry, 2014, 33, 662-670.	2.2	10
51	Induced community tolerance of periphyton towards combined salt and toxic stress. Freshwater Biology, 2016, 61, 2152-2161.	1.2	10
52	Investigation of architecture development and phosphate distribution in <i>Chlorella</i> biofilm by complementary microscopy techniques. FEMS Microbiology Ecology, 2019, 95, .	1.3	10
53	Interactions between microplastics and benthic biofilms in fluvial ecosystems: Knowledge gaps and future trends. Freshwater Science, 2022, 41, 442-458.	0.9	10
54	Chapter 5 Predicting toxic effects of contaminants in ecosystems using single species investigations. Trace Metals and Other Contaminants in the Environment, 2003, 6, 153-198.	0.1	6

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55	Community metabolomics provides insights into mechanisms of pollution-induced community tolerance of periphyton. Science of the Total Environment, 2022, 824, 153777.	3.9	6
56	Evaluating Multiple Stressor Effects on Benthicâ€"Pelagic Freshwater Communities in Systems of Different Complexities: Challenges in Upscaling. Water (Switzerland), 2022, 14, 581.	1.2	3
57	Ecological Relevance of Key Toxicants in Aquatic Systems. Handbook of Environmental Chemistry, 2011, , 315-339.	0.2	2
58	Microplastic â€" A New Habitat for Biofilm Communities. , 2020, , 1-20.		0
59	Microplastic: A New Habitat for Biofilm Communities. , 2022, , 1049-1068.		0