

# Kristin Schirmer

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

88  
papers

3,401  
citations

34  
h-index

57  
g-index

90  
ext. papers

4,033  
ext. citations

6.8  
avg, IF

5.46  
L-index

#	Paper	IF	Citations
88	Nanomaterials in the environment: Behavior, fate, bioavailability, and effects-An updated review. <i>Environmental Toxicology and Chemistry</i> , <b>2018</b> , 37, 2029-2063	3.8	291
87	Proposal to improve vertebrate cell cultures to establish them as substitutes for the regulatory testing of chemicals and effluents using fish. <i>Toxicology</i> , <b>2006</b> , 224, 163-83	4.4	142
86	Development and application of the adverse outcome pathway framework for understanding and predicting chronic toxicity: I. Challenges and research needs in ecotoxicology. <i>Chemosphere</i> , <b>2015</b> , 120, 764-77	8.4	138
85	Linking toxicity and adaptive responses across the transcriptome, proteome, and phenotype of <i>Chlamydomonas reinhardtii</i> exposed to silver. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 3490-5	11.5	121
84	A European perspective on alternatives to animal testing for environmental hazard identification and risk assessment. <i>Regulatory Toxicology and Pharmacology</i> , <b>2013</b> , 67, 506-30	3.4	121
83	Abcb4 acts as multixenobiotic transporter and active barrier against chemical uptake in zebrafish ( <i>Danio rerio</i> ) embryos. <i>BMC Biology</i> , <b>2013</b> , 11, 69	7.3	114
82	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> , <b>2017</b> , 601-602, 1849-1868	10.2	106
81	Toxicity of tungsten carbide and cobalt-doped tungsten carbide nanoparticles in mammalian cells in vitro. <i>Environmental Health Perspectives</i> , <b>2009</b> , 117, 530-6	8.4	100
80	Predicting concentrations of organic chemicals in fish by using toxicokinetic models. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 3273-80	10.3	98
79	Mixtures of chemical pollutants at European legislation safety concentrations: how safe are they?. <i>Toxicological Sciences</i> , <b>2014</b> , 141, 218-33	4.4	95
78	Evaluating the toxicity of Triton X-100 to protozoan, fish, and mammalian cells using fluorescent dyes as indicators of cell viability. <i>Ecotoxicology and Environmental Safety</i> , <b>2004</b> , 57, 375-82	7	92
77	Predicting fish acute toxicity using a fish gill cell line-based toxicity assay. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 1110-9	10.3	89
76	Application of Alamar blue/5-carboxyfluorescein diacetate acetoxymethyl ester as a noninvasive cell viability assay in primary hepatocytes from rainbow trout. <i>Analytical Biochemistry</i> , <b>2005</b> , 344, 76-85	3.1	84
75	Toxicity of silver nanoparticles to a fish gill cell line: role of medium composition. <i>Nanotoxicology</i> , <b>2015</b> , 9, 54-63	5.3	79
74	Agglomeration of tungsten carbide nanoparticles in exposure medium does not prevent uptake and toxicity toward a rainbow trout gill cell line. <i>Aquatic Toxicology</i> , <b>2009</b> , 93, 91-9	5.1	76
73	Novel test procedure to evaluate the treatability of wastewater with ozone. <i>Water Research</i> , <b>2015</b> , 75, 324-35	12.5	72
72	Applying whole-water samples directly to fish cell cultures in order to evaluate the toxicity of industrial effluent. <i>Water Research</i> , <b>2002</b> , 36, 3727-38	12.5	70

71	Silver nanoparticle toxicity and association with the alga <i>Euglena gracilis</i> . <i>Environmental Science: Nano</i> , <b>2015</b> , 2, 594-602	7.1	68
70	Assessing the bioaccumulation potential of ionizable organic compounds: Current knowledge and research priorities. <i>Environmental Toxicology and Chemistry</i> , <b>2017</b> , 36, 882-897	3.8	68
69	Development of a partition-controlled dosing system for cell assays. <i>Chemical Research in Toxicology</i> , <b>2010</b> , 23, 1806-14	4	65
68	Silver nanoparticle effects on stream periphyton during short-term exposures. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 1165-72	10.3	62
67	Development and application of the adverse outcome pathway framework for understanding and predicting chronic toxicity: II. A focus on growth impairment in fish. <i>Chemosphere</i> , <b>2015</b> , 120, 778-92	8.4	59
66	Polycyclic aromatic hydrocarbons as inducers of cytochrome P4501A enzyme activity in the rainbow trout liver cell line, RTL-W1, and in primary cultures of rainbow trout hepatocytes. <i>Environmental Toxicology and Chemistry</i> , <b>2001</b> , 20, 632-643	3.8	59
65	Effects of solvents and dosing procedure on chemical toxicity in cell-based in vitro assays. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 4775-81	10.3	55
64	Constitutive mRNA expression and protein activity levels of nine ABC efflux transporters in seven permanent cell lines derived from different tissues of rainbow trout ( <i>Oncorhynchus mykiss</i> ). <i>Aquatic Toxicology</i> , <b>2011</b> , 101, 438-46	5.1	53
63	Measured and modeled toxicokinetics in cultured fish cells and application to in vitro-in vivo toxicity extrapolation. <i>PLoS ONE</i> , <b>2014</b> , 9, e92303	3.7	50
62	Effect of TiO <sub>2</sub> nanoparticles and UV radiation on extracellular enzyme activity of intact heterotrophic biofilms. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 11620-8	10.3	46
61	Imidacloprid induces adverse effects on fish early life stages that are more severe in Japanese medaka ( <i>Oryzias latipes</i> ) than in zebrafish ( <i>Danio rerio</i> ). <i>Chemosphere</i> , <b>2019</b> , 225, 470-478	8.4	43
60	A fish intestinal epithelial barrier model established from the rainbow trout ( <i>Oncorhynchus mykiss</i> ) cell line, RTgutGC. <i>Cell Biology and Toxicology</i> , <b>2017</b> , 33, 539-555	7.4	41
59	Transitory metabolic disruption and cytotoxicity elicited by benzo[a]pyrene in two cell lines from rainbow trout liver. <i>Journal of Biochemical and Molecular Toxicology</i> , <b>2000</b> , 14, 262-76	3.4	39
58	An interlaboratory comparison of nanosilver characterisation and hazard identification: Harmonising techniques for high quality data. <i>Environment International</i> , <b>2016</b> , 87, 20-32	12.9	38
57	Silver nanoparticle-protein interactions in intact rainbow trout gill cells. <i>Environmental Science: Nano</i> , <b>2016</b> , 3, 1174-1185	7.1	35
56	Early life exposure to PCB126 results in delayed mortality and growth impairment in the zebrafish larvae. <i>Aquatic Toxicology</i> , <b>2015</b> , 169, 168-78	5.1	35
55	The influence of modes of action and physicochemical properties of chemicals on the correlation between in vitro and acute fish toxicity data. <i>Toxicology in Vitro</i> , <b>2009</b> , 23, 1372-9	3.6	35
54	Development of mutagenicity during degradation of N-nitrosamines by advanced oxidation processes. <i>Water Research</i> , <b>2014</b> , 66, 399-410	12.5	34

53	Transformation of Contaminant Candidate List (CCL3) compounds during ozonation and advanced oxidation processes in drinking water: Assessment of biological effects. <i>Water Research</i> , <b>2016</b> , 93, 110-120	12.5	31
52	Systems toxicology approach to understand the kinetics of benzo(a)pyrene uptake, biotransformation, and DNA adduct formation in a liver cell model. <i>Chemical Research in Toxicology</i> , <b>2014</b> , 27, 443-53	4	31
51	Effect of media composition on bioavailability and toxicity of silver and silver nanoparticles in fish intestinal cells (RTgutGC). <i>Nanotoxicology</i> , <b>2016</b> , 10, 1526-1534	5.3	31
50	Toxicology across scales: Cell population growth in vitro predicts reduced fish growth. <i>Science Advances</i> , <b>2015</b> , 1, e1500302	14.3	27
49	Biotransformation of Benzo[ a]pyrene by Three Rainbow Trout ( <i>Onchorhynchus mykiss</i> ) Cell Lines and Extrapolation To Derive a Fish Bioconcentration Factor. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 3091-3100	10.3	26
48	The use of fish-derived cell lines for investigation of environmental contaminants. <i>Current Protocols in Toxicology / Editorial Board, Mahin D Maines (editor-in-chief) [et Al ]</i> , <b>2003</b> , Chapter 1, Unit 1.5	1	26
47	A novel two-compartment barrier model for investigating nanoparticle transport in fish intestinal epithelial cells. <i>Environmental Science: Nano</i> , <b>2016</b> , 3, 388-395	7.1	25
46	Cell culture-based biosensing techniques for detecting toxicity in water. <i>Current Opinion in Biotechnology</i> , <b>2017</b> , 45, 59-68	11.4	24
45	Physical-chemical characterization of tungsten carbide nanoparticles as a basis for toxicological investigations. <i>Nanotoxicology</i> , <b>2010</b> , 4, 196-206	5.3	24
44	Dose-dependent effects of morphine on lipopolysaccharide (LPS)-induced inflammation, and involvement of multixenobiotic resistance (MXR) transporters in LPS efflux in teleost fish. <i>Environmental Pollution</i> , <b>2017</b> , 221, 105-115	9.3	23
43	Rainbow Trout ( ) Intestinal Epithelial Cells as a Model for Studying Gut Immune Function and Effects of Functional Feed Ingredients. <i>Frontiers in Immunology</i> , <b>2019</b> , 10, 152	8.4	23
42	Glutathione S-Transferase Protein Expression in Different Life Stages of Zebrafish ( <i>Danio rerio</i> ). <i>Toxicological Sciences</i> , <b>2018</b> , 162, 702-712	4.4	22
41	Establishment of the first humpback whale fibroblast cell lines and their application in chemical risk assessment. <i>Aquatic Toxicology</i> , <b>2015</b> , 167, 240-7	5.1	21
40	Use of fish gill cells in culture to evaluate the cytotoxicity and photocytotoxicity of intact and photomodified creosote. <i>Environmental Toxicology and Chemistry</i> , <b>1999</b> , 18, 1277-1288	3.8	21
39	Evaluating environmental risk assessment models for nanomaterials according to requirements along the product innovation Stage-Gate process. <i>Environmental Science: Nano</i> , <b>2019</b> , 6, 505-518	7.1	20
38	Co-exposure to polystyrene plastic beads and polycyclic aromatic hydrocarbon contaminants in fish gill (RTgill-W1) and intestinal (RTgutGC) epithelial cells derived from rainbow trout ( <i>Oncorhynchus mykiss</i> ). <i>Environmental Pollution</i> , <b>2019</b> , 248, 706-714	9.3	20
37	Repeatability and Reproducibility of the RTgill-W1 Cell Line Assay for Predicting Fish Acute Toxicity. <i>Toxicological Sciences</i> , <b>2019</b> , 169, 353-364	4.4	19
36	Chemical Aspects of Nanoparticle Ecotoxicology. <i>Chimia</i> , <b>2014</b> , 68, 806-11	1.3	18

35	Fish-gut-on-chip: development of a microfluidic bioreactor to study the role of the fish intestine in vitro. <i>Lab on A Chip</i> , <b>2019</b> , 19, 3268-3276	7.2	16
34	Ultrathin Alumina Membranes as Scaffold for Epithelial Cell Culture from the Intestine of Rainbow Trout. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 9496-9505	9.5	14
33	Clobetasol propionate causes immunosuppression in zebrafish ( <i>Danio rerio</i> ) at environmentally relevant concentrations. <i>Ecotoxicology and Environmental Safety</i> , <b>2017</b> , 138, 16-24	7	14
32	Long-term exposure to silver nanoparticles affects periphyton community structure and function. <i>Environmental Science: Nano</i> , <b>2018</b> , 5, 1397-1407	7.1	12
31	Interference of silver nanoparticles with essential metal homeostasis in a novel enterohepatic fish in vitro system. <i>Environmental Science: Nano</i> , <b>2019</b> , 6, 1777-1790	7.1	11
30	Silver nanoparticles inhibit fish gill cell proliferation in protein-free culture medium. <i>Nanotoxicology</i> , <b>2016</b> , 10, 1075-83	5.3	11
29	Lifetime extension of humpback whale skin fibroblasts and their response to lipopolysaccharide (LPS) and a mixture of polychlorinated biphenyls (Aroclor). <i>Cell Biology and Toxicology</i> , <b>2019</b> , 35, 387-398	7.4	11
28	TransFER: a new device to measure the transfer of volatile and hydrophobic organic chemicals across an in vitro intestinal fish cell barrier. <i>Analytical Methods</i> , <b>2018</b> , 10, 4394-4403	3.2	10
27	A validated algorithm for selecting non-toxic chemical concentrations. <i>ALTEX: Alternatives To Animal Experimentation</i> , <b>2018</b> , 35, 37-50	4.3	9
26	Hexachlorobenzene exerts genotoxic effects in a humpback whale cell line under stable exposure conditions. <i>RSC Advances</i> , <b>2019</b> , 9, 39447-39457	3.7	8
25	Time- and concentration-dependent expression of immune and barrier genes in the RTgutGC fish intestinal model following immune stimulation. <i>Fish and Shellfish Immunology</i> , <b>2019</b> , 88, 308-317	4.3	7
24	Improving a fish intestinal barrier model by combining two rainbow trout cell lines: epithelial RTgutGC and fibroblastic RTgutF. <i>Cytotechnology</i> , <b>2019</b> , 71, 835-848	2.2	7
23	Evaluation of a porcine lens and fluorescence assay approach for in vitro ocular toxicological investigations. <i>ATLA Alternatives To Laboratory Animals</i> , <b>2002</b> , 30, 505-13	2.1	7
22	Common Gene Expression Patterns in Environmental Model Organisms Exposed to Engineered Nanomaterials: A Meta-Analysis. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 335-344	10.3	7
21	LC-APCI(-)-MS Determination of 1-Chloro-2,4-dinitrobenzene, a Model Substrate for Glutathione S-Transferases. <i>Journal of the American Society for Mass Spectrometry</i> , <b>2020</b> , 31, 467-472	3.5	5
20	Anthropogenic Chemicals As Underestimated Drivers of Biodiversity Loss: Scientific and Societal Implications. <i>Environmental Science &amp; Technology</i> , <b>2022</b> ,	10.3	5
19	Zebrafish early life stages as alternative model to study Designer drugs Concordance with mammals in response to opioids. <i>Toxicology and Applied Pharmacology</i> , <b>2021</b> , 419, 115483	4.6	5
18	Intestinal Fish Cell Barrier Model to Assess Transfer of Organic Chemicals in Vitro: An Experimental and Computational Study. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 12062-12070	10.3	4

17	Biotransformation Capacity of Zebrafish ( <i>Danio rerio</i> ) Early Life Stages: Functionality of the Mercapturic Acid Pathway. <i>Toxicological Sciences</i> , <b>2020</b> , 176, 355-365	4.4	4
16	Extending the concept of predicting fish acute toxicity in vitro to the intestinal cell line RTgutGC. <i>ALTEX: Alternatives To Animal Experimentation</i> , <b>2020</b> , 37, 37-46	4.3	4
15	Toxic effects of substituted p-benzoquinones and hydroquinones in in vitro bioassays are altered by reactions with the cell assay medium. <i>Water Research</i> , <b>2021</b> , 202, 117415	12.5	4
14	Impact of wastewater on the microbial diversity of periphyton and its tolerance to micropollutants in an engineered flow-through channel system. <i>Water Research</i> , <b>2021</b> , 203, 117486	12.5	4
13	Contribution of hepatic cytochrome CYP1A and metallothionein mRNA abundance to biomonitoring-A case study with European flounder ( <i>Platichthys flesus</i> ) from the Gulf of Gdańsk. <i>Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology</i> , <b>2016</b> , 188, 24-9	3.2	3
12	Use of fish gill cells in culture to evaluate the cytotoxicity and photocytotoxicity of intact and photomodified creosote <b>1999</b> , 18, 1277		3
11	A ribonucleoprotein transfection strategy for CRISPR/Cas9-mediated gene editing and single cell cloning in rainbow trout cells. <i>Cell and Bioscience</i> , <b>2021</b> , 11, 103	9.8	2
10	Predicting exposure concentrations of chemicals with a wide range of volatility and hydrophobicity in different multi-well plate set-ups. <i>Scientific Reports</i> , <b>2021</b> , 11, 4680	4.9	2
9	Toxicity and translocation of Ag, CuO, ZnO and TiO <sub>2</sub> nanoparticles upon exposure to fish intestinal epithelial cells. <i>Environmental Science: Nano</i> , <b>2021</b> , 8, 2249-2260	7.1	2
8	Cell-based data to predict the toxicity of chemicals to fish. Commentary on the manuscript by Rodrigues et al., 2019. Cell-based assays seem not to accurately predict fish short-term toxicity of pesticides. <i>Environmental Pollution</i> 252:476-482. <i>Environmental Pollution</i> , <b>2019</b> , 254, 113060	9.3	1
7	In Vitro-In Vivo Extrapolation to Predict Bioaccumulation and Toxicity of Chemicals in Fish Using Physiologically Based Toxicokinetic Models. <i>Methods in Pharmacology and Toxicology</i> , <b>2019</b> , 1	1.1	1
6	Digestion of Tire Particles in a Fish Model ( ): Solubilization Kinetics of Heavy Metals and Effects of Food Coingestion. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 15788-15796	10.3	1
5	New Stable Cell Lines Derived from the Proximal and Distal Intestine of Rainbow Trout ( ) Retain Several Properties Observed In Vivo. <i>Cells</i> , <b>2021</b> , 10,	7.9	1
4	Predicting chemical hazard across taxa through machine learning.. <i>Environment International</i> , <b>2022</b> , 163, 107184	12.9	1
3	Characterization of the Mercapturic Acid Pathway, an Important Phase II Biotransformation Route, in a Zebrafish Embryo Cell Line. <i>Chemical Research in Toxicology</i> , <b>2020</b> , 33, 2863-2871	4	0
2	Cytotoxicity, Accumulation and Translocation of Silver and Silver Sulfide Nanoparticles in contact with Rainbow Trout Intestinal Cells. <i>Aquatic Toxicology</i> , <b>2021</b> , 237, 105869	5.1	0
1	Characterization of the ERK1/2 phosphorylation profile in human and fish liver cells upon exposure to chemicals of environmental concern. <i>Environmental Toxicology and Pharmacology</i> , <b>2021</b> , 88, 103749	5.8	