Stefan Scholz

List of Publications by Year
in descending order

89 papers	5,712 citations	101543 36 h-index	76900 74 g-index
91 all docs	91 docs citations	91 times ranked	6904 citing authors

#	Article	IF	Citations
1	Zebrafish embryos as an alternative to animal experimentsâ€”A commentary on the definition of the onset of protected life stages in animal welfare regulations. Reproductive Toxicology, 2012, 33, 128-132.	2.9	491
2	The zebrafish embryo model in environmental risk assessmentâ€”applications beyond acute toxicity testing. Environmental Science and Pollution Research, 2008, 15, 394-404.	5.3	472
3	Benchmarking Organic Micropollutants in Wastewater, Recycled Water and Drinking Water with In Vitro Bioassays. Environmental Science & Technology, 2014, 48, 1940-1956.	10.0	367
4	Applying Adverse Outcome Pathways (AOPs) to support Integrated Approaches to Testing and Assessment (IATA). Regulatory Toxicology and Pharmacology, 2014, 70, 629-640.	2.7	291
5	17-Î±-ethinylestradiol affects reproduction, sexual differentiation and aromatase gene expression of the medaka (Oryzias latipes). Aquatic Toxicology, 2000, 50, 363-373.	4.0	219
6	OECD validation study to assess intra- and inter-laboratory reproducibility of the zebrafish embryo toxicity test for acute aquatic toxicity testing. Regulatory Toxicology and Pharmacology, 2014, 69, 496-511.	2.7	192
7	Molecular biomarkers of endocrine disruption in small model fish. Molecular and Cellular Endocrinology, 2008, 293, 57-70.	3.2	170
8	An ecotoxicological view on neurotoxicity assessment. Environmental Sciences Europe, 2018, 30, 46.	5.5	168
9	Di-myo-inositol-1, 1â€²-phosphate: A new inositol phosphate isolated fromPyrococcus woesei. FEBS Letters, 1992, 306, 239-242.	2.8	159
10	From the exposome to mechanistic understanding of chemical-induced adverse effects. Environment International, 2017, 99, 97-106.	10.0	146
11	A European perspective on alternatives to animal testing for environmental hazard identification and risk assessment. Regulatory Toxicology and Pharmacology, 2013, 67, 506-530.	2.7	139
12	Mixture Toxicity Revisited from a Toxicogenomic Perspective. Environmental Science & Technology, 2012, 46, 2508-2522.	10.0	135
13	Predicting Adult Fish Acute Lethality with the Zebrafish Embryo: Relevance of Test Duration, Endpoints, Compound Properties, and Exposure Concentration Analysis. Environmental Science & Technology, 2012, 46, 9690-9700.	10.0	123
14	Toxicity of Tungsten Carbide and Cobalt-Doped Tungsten Carbide Nanoparticles in Mammalian Cells <i>in Vitro</i>. Environmental Health Perspectives, 2009, 117, 530-536.	6.0	121
15	Differential gene expression as a toxicant-sensitive endpoint in zebrafish embryos and larvae. Aquatic Toxicology, 2007, 81, 355-364.	4.0	112
16	Effects of Endocrine Disrupters on Sexual, Gonadal Development in Fish. Sexual Development, 2009, 3, 136-151.	2.0	111
17	Building and Applying Quantitative Adverse Outcome Pathway Models for Chemical Hazard and Risk Assessment. Environmental Toxicology and Chemistry, 2019, 38, 1850-1865.	4.3	105
18	Fish Embryo Toxicity Test: Identification of Compounds with Weak Toxicity and Analysis of Behavioral Effects To Improve Prediction of Acute Toxicity for Neurotoxic Compounds. Environmental Science & Technology, 2015, 49, 7002-7011.	10.0	99

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19	Applicability of the fish embryo acute toxicity (FET) test (OECD 236) in the regulatory context of Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH). Environmental Toxicology and Chemistry, 2018, 37, 657-670.	4.3	97
20	Bacterial lipopolysaccharides induce genes involved in the innate immune response in embryos of the zebrafish (Danio rerio). Fish and Shellfish Immunology, 2007, 23, 901-905.	3.6	90
21	Induction of vitellogenin in vivo and in vitro in the model teleost medaka (Oryzias latipes): comparison of gene expression and protein levels. Marine Environmental Research, 2004, 57, 235-244.	2.5	87
22	Agglomeration of tungsten carbide nanoparticles in exposure medium does not prevent uptake and toxicity toward a rainbow trout gill cell line. Aquatic Toxicology, 2009, 93, 91-99.	4.0	82
23	Adverse Outcome Pathways during Early Fish Development: A Conceptual Framework for Identification of Chemical Screening and Prioritization Strategies. Toxicological Sciences, 2011, 123, 349-358.	3.1	79
24	Automated Morphological Feature Assessment for Zebrafish Embryo Developmental Toxicity Screens. Toxicological Sciences, 2019, 167, 438-449.	3.1	79
25	Development of a general baseline toxicity QSAR model for the fish embryo acute toxicity test. Chemosphere, 2016, 164, 164-173.	8.2	71
26	Alternatives to<i>in vivo</i>tests to detect endocrine disrupting chemicals (EDCs) in fish and amphibians â€“ screening for estrogen, androgen and thyroid hormone disruption. Critical Reviews in Toxicology, 2013, 43, 45-72.	3.9	60
27	Hypo- or hyperactivity of zebrafish embryos provoked by neuroactive substances: a review on how experimental parameters impact the predictability of behavior changes. Environmental Sciences Europe, 2019, 31, .	5.5	50
28	Developing a list of reference chemicals for testing alternatives to whole fish toxicity tests. Aquatic Toxicology, 2008, 90, 128-137.	4.0	49
29	Zebrafish embryos as an alternative model for screening of drug-induced organ toxicity. Archives of Toxicology, 2013, 87, 767-769.	4.2	49
30	Gene expression analysis in zebrafish embryos: A potential approach to predict effect concentrations in the fish early life stage test. Environmental Toxicology and Chemistry, 2009, 28, 1970-1978.	4.3	46
31	Endocrine, teratogenic and neurotoxic effects of cyanobacteria detected by cellular in vitro and zebrafish embryos assays. Chemosphere, 2015, 120, 321-327.	8.2	46
32	Hormonal Induction and Stability of Monosex Populations in the Medaka (Oryzias latipes): Expression of Sex-Specific Marker Genes. Biology of Reproduction, 2003, 69, 673-678.	2.7	42
33	Tungsten carbide cobalt nanoparticles exert hypoxia-like effects on the gene expression level in human keratinocytes. BMC Genomics, 2010, 11, 65.	2.8	42
34	Identification and Characterization of Androgen-Responsive Genes in Zebrafish Embryos. Environmental Science & Technology, 2015, 49, 11789-11798.	10.0	42
35	Synthesis and biological evaluation of SANT-2 and analogues as inhibitors of the hedgehog signaling pathway. Bioorganic and Medicinal Chemistry, 2009, 17, 4943-4954.	3.0	41
36	Transgenic (cyp19a1b-GFP) zebrafish embryos as a tool for assessing combined effects of oestrogenic chemicals. Aquatic Toxicology, 2013, 138-139, 88-97.	4.0	39

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37	Retinoid-like activity and teratogenic effects of cyanobacterial exudates. Aquatic Toxicology, 2014, 155, 283-290.	4.0	37
38	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.	10.0	37
39	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
40	Induction of CYP1A in Primary Cultures of Rainbow Trout (Oncorhynchus mykiss) Liver Cells: Concentrationâ€“Response Relationships of Four Model Substances. Ecotoxicology and Environmental Safety, 1999, 43, 252-260.	6.0	35
41	Effect-directed analysis for estrogenic compounds in a fluvial sediment sample using transgenic cyp19a1b-GFP zebrafish embryos. Aquatic Toxicology, 2014, 154, 221-229.	4.0	34
42	Yolk Sac of Zebrafish Embryos as Backpack for Chemicals?. Environmental Science & Technology, 2020, 54, 10159-10169.	10.0	33
43	Zebrafish embryo tolerance to environmental stress factorsâ€"Concentrationâ€“dose response analysis of oxygen limitation, pH, and UVâ€light irradiation. Environmental Toxicology and Chemistry, 2017, 36, 682-690.	4.3	32
44	Naringenin-type flavonoids show different estrogenic effects in mammalian and teleost test systems. Biochemical and Biophysical Research Communications, 2005, 326, 909-916.	2.1	30
45	Transcriptional Response of Zebrafish Embryos Exposed to Neurotoxic Compounds Reveals a Muscle Activity Dependent hspb11 Expression. PLoS ONE, 2011, 6, e29063.	2.5	30
46	Development of a monoclonal antibody for ELISA of CYP1A in primary cultures of rainbow trout Oncorhynchus mykiss hepatocytes. Biomarkers, 1997, 2, 287-294.	1.9	29
47	Differential sensitivity in embryonic stages of the zebrafish (Danio rerio): The role of toxicokinetics for stage-specific susceptibility for azinphos-methyl lethal effects. Aquatic Toxicology, 2015, 166, 36-41.	4.0	29
48	Cellular Uptake Kinetics of Neutral and Charged Chemicals in <i>in Vitro</i> Assays Measured by Fluorescence Microscopy. Chemical Research in Toxicology, 2018, 31, 646-657.	3.3	29
49	Optimization of the spontaneous tail coiling test for fast assessment of neurotoxic effects in the zebrafish embryo using an automated workflow in KNIMEÂ®. Neurotoxicology and Teratology, 2020, 81, 106918.	2.4	28
50	The role of cyp1a and heme oxygenase 1 gene expression for the toxicity of 3,4-dichloroaniline in zebrafish (Danio rerio) embryos. Aquatic Toxicology, 2008, 86, 112-120.	4.0	26
51	Extensive review of fish embryo acute toxicities for the prediction of GHS acute systemic toxicity categories. Regulatory Toxicology and Pharmacology, 2014, 69, 572-579.	2.7	26
52	An automated screening method for detecting compounds with goitrogenic activity using transgenic zebrafish embryos. PLoS ONE, 2018, 13, e0203087.	2.5	26
53	Diffraction-limited axial scanning in thick biological tissue with an aberration-correcting adaptive lens. Scientific Reports, 2019, 9, 9532.	3.3	26
54	A multi-omics concentration-response framework uncovers novel understanding of triclosan effects in the chlorophyte Scenedesmus vacuolatus. Journal of Hazardous Materials, 2020, 397, 122727.	12.4	25

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55	The Ecoâ€Exposome Concept: Supporting an Integrated Assessment of Mixtures of Environmental Chemicals. Environmental Toxicology and Chemistry, 2022, 41, 30-45.	4.3	25
56	Viability and differential function of rainbow trout liver cells in primary culture: Coculture with two permanent fish cells. In Vitro Cellular and Developmental Biology - Animal, 1998, 34, 762-771.	1.5	23
57	Comparative analysis of goitrogenic effects of phenylthiourea and methimazole in zebrafish embryos. Reproductive Toxicology, 2015, 57, 10-20.	2.9	23
58	Critical Membrane Concentration and Mass-Balance Model to Identify Baseline Cytotoxicity of Hydrophobic and Ionizable Organic Chemicals in Mammalian Cell Lines. Chemical Research in Toxicology, 2021, 34, 2100-2109.	3.3	23
59	Unravelling the chemical exposome in cohort studies: routes explored and steps to become comprehensive. Environmental Sciences Europe, 2021, 33, 17.	5.5	22
60	Transient Overexpression of adh8a Increases Allyl Alcohol Toxicity in Zebrafish Embryos. PLoS ONE, 2014, 9, e90619.	2.5	22
61	Zebrafish biosensor for toxicant induced muscle hyperactivity. Scientific Reports, 2016, 6, 23768.	3.3	20
62	ANALYSIS OF ESTROGENIC EFFECTS BY QUANTIFICATION OF GREEN FLUORESCENT PROTEIN IN JUVENILE FISH OF A TRANSGENIC MEDAKA. Environmental Toxicology and Chemistry, 2005, 24, 2553.	4.3	19
63	Metaâ€analysis of fish early life stage testsâ€"Association of toxic ratios and acuteâ€toâ€chronic ratios with modes of action. Environmental Toxicology and Chemistry, 2018, 37, 955-969.	4.3	17
64	Limitations and uncertainties of acute fish toxicity assessments can be reduced using alternative methods. ALTEX: Alternatives To Animal Experimentation, 2021, 38, 20-32.	1.5	17
65	Towards a qAOP framework for predictive toxicology - Linking data to decisions. Computational Toxicology, 2022, 21, 100195.	3.3	17
66	Elemental imaging (LA-ICP-MS) of zebrafish embryos to study the toxicokinetics of the acetylcholinesterase inhibitor naled. Analytical and Bioanalytical Chemistry, 2019, 411, 617-627.	3.7	16
67	The role of chemical speciation, chemical fractionation and calcium disruption in manganese-induced developmental toxicity in zebrafish (Danio rerio) embryos. Journal of Trace Elements in Medicine and Biology, 2015, 32, 209-217.	3.0	15
68	Comparative Assessment of the Sensitivity of Fish Earlyâ€Life Stage, <i>Daphnia</i>, and Algae Tests to the Chronic Ecotoxicity of Xenobiotics: Perspectives for Alternatives to Animal Testing. Environmental Toxicology and Chemistry, 2020, 39, 30-41.	4.3	15
69	Probabilistic modelling of developmental neurotoxicity based on a simplified adverse outcome pathway network. Computational Toxicology, 2022, 21, 100206.	3.3	15
70	Species-specific developmental toxicity in rats and rabbits: Generation of a reference compound list for development of alternative testing approaches. Reproductive Toxicology, 2018, 76, 93-102.	2.9	14
71	Chemical effects on dye efflux activity in live zebrafish embryos and on zebrafish Abcb4 ATPase activity. FEBS Letters, 2021, 595, 828-843.	2.8	14
72	The biosynthesis pathway of di-myo-inositol-1,1â€²-phosphate in Pyrococcus woesei. FEMS Microbiology Letters, 1998, 168, 37-42.	1.8	13

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73	Transcriptional responses of zebrafish embryos exposed to potential sonic hedgehog pathway interfering compounds deviate from expression profiles of cyclopamine. Reproductive Toxicology, 2012, 33, 254-263.	2.9	12
74	Inhibition of neurite outgrowth and enhanced effects compared to baseline toxicity in SH-SY5Y cells. Archives of Toxicology, 2022, 96, 1039-1053.	4.2	12
75	Evaluation of health risks of nano- and microparticles. Powder Metallurgy, 2008, 51, 8-9.	1.7	11
76	Automated measurement of the spontaneous tail coiling of zebrafish embryos as a sensitive behavior endpoint using a workflow in KNIME. MethodsX, 2021, 8, 101330.	1.6	9
77	Zebrafish embryo and acute fish toxicity test show similar sensitivity for narcotic compounds. ALTEX: Alternatives To Animal Experimentation, 2019, 36, 131-135.	1.5	8
78	Germ cell-less expression in medaka (Oryzias latipes). Molecular Reproduction and Development, 2004, 67, 15-18.	2.0	7
79	Assessing Combined Effects for Mixtures of Similar and Dissimilar Acting Neuroactive Substances on Zebrafish Embryo Movement. Toxics, 2021, 9, 104.	3.7	7
80	The EU chemicals strategy for sustainability: an opportunity to develop new approaches for hazard and risk assessment. Archives of Toxicology, 2022, 96, 2381-2386.	4.2	7
81	Grouping of chemicals into mode of action classes by automated effect pattern analysis using the zebrafish embryo toxicity test. Archives of Toxicology, 2022, 96, 1353-1369.	4.2	6
82	Of fine powders, hardmetals, hazard and health risk. Metal Powder Report, 2007, 62, 12-14.	0.1	4
83	Editorial. Reproductive Toxicology, 2012, 33, 127.	2.9	4
84	Tungsten carbide and tungsten carbide cobalt nanoparticle toxicity: The role of cellular particle uptake, leached ions and cobalt bioavailability. Toxicology Letters, 2009, 189, S185.	0.8	2
85	<i>In Response</i>: Quantitative adverse outcome pathways for prediction of adverse effectsâ€"An academic perspective. Environmental Toxicology and Chemistry, 2015, 34, 1935-1940.	4.3	2
86	Yolkâ€"Water Partitioning of Neutral Organic Compounds in the Model Organism Danio rerio. Environmental Toxicology and Chemistry, 2020, 39, 1506-1516.	4.3	2
87	Evaluation of Neurotoxic Effects in Zebrafish Embryos by Automatic Measurement of Early Motor Behaviors. Neuromethods, 2021, , 381-397.	0.3	1
88	Pharmaceutical Contaminants in Urban Water Cycles: A Discussion of Novel Concepts for Environmental Risk Assessment. Environmental Pollution, 2010, , 227-243.	0.4	1
89	Fish embryos as alternative models for drug safety evaluation. , 0, , 244-268.		0