

# Ralf B Schfer

## List of Publications by Citations

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**Version:** 2024-04-20

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135  
papers

5,955  
citations

41  
h-index

74  
g-index

147  
ext. papers

7,362  
ext. citations

7.4  
avg, IF

6.03  
L-index

#	Paper	IF	Citations
135	Organic chemicals jeopardize the health of freshwater ecosystems on the continental scale. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 9549-54	11.5	431
134	Pesticides reduce regional biodiversity of stream invertebrates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 11039-43	11.5	420
133	Salinisation of rivers: an urgent ecological issue. <i>Environmental Pollution</i> , <b>2013</b> , 173, 157-67	9.3	377
132	Effects of pesticides on community structure and ecosystem functions in agricultural streams of three biogeographical regions in Europe. <i>Science of the Total Environment</i> , <b>2007</b> , 382, 272-85	10.2	292
131	Towards the review of the European Union Water Framework Directive: Recommendations for more efficient assessment and management of chemical contamination in European surface water resources. <i>Science of the Total Environment</i> , <b>2017</b> , 576, 720-737	10.2	196
130	Thresholds for the effects of pesticides on invertebrate communities and leaf breakdown in stream ecosystems. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 5134-42	10.3	190
129	Fungicides: An Overlooked Pesticide Class?. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 3347-3365	10.3	172
128	WATER. Saving freshwater from salts. <i>Science</i> , <b>2016</b> , 351, 914-6	33.3	163
127	The footprint of pesticide stress in communities--species traits reveal community effects of toxicants. <i>Science of the Total Environment</i> , <b>2008</b> , 406, 484-90	10.2	148
126	Effects of pesticides monitored with three sampling methods in 24 sites on macroinvertebrates and microorganisms. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 1665-72	10.3	138
125	Impacts of multiple stressors on freshwater biota across spatial scales and ecosystems. <i>Nature Ecology and Evolution</i> , <b>2020</b> , 4, 1060-1068	12.3	126
124	Predicting the synergy of multiple stress effects. <i>Scientific Reports</i> , <b>2016</b> , 6, 32965	4.9	125
123	Long-term stream invertebrate community alterations induced by the insecticide thiacloprid: effect concentrations and recovery dynamics. <i>Science of the Total Environment</i> , <b>2008</b> , 405, 96-108	10.2	102
122	A trait database of stream invertebrates for the ecological risk assessment of single and combined effects of salinity and pesticides in South-East Australia. <i>Science of the Total Environment</i> , <b>2011</b> , 409, 2055-63	10.2	100
121	Pesticide mixtures in streams of several European countries and the USA. <i>Science of the Total Environment</i> , <b>2016</b> , 573, 680-689	10.2	100
120	Review on the effects of toxicants on freshwater ecosystem functions. <i>Environmental Pollution</i> , <b>2013</b> , 180, 324-9	9.3	95
119	Effects of pesticide toxicity, salinity and other environmental variables on selected ecosystem functions in streams and the relevance for ecosystem services. <i>Science of the Total Environment</i> , <b>2012</b> , 415, 69-78	10.2	92

118	Pesticide risk mitigation by vegetated treatment systems: a meta-analysis. <i>Journal of Environmental Quality</i> , <b>2011</b> , 40, 1068-80	3.4	91
117	SPEAR indicates pesticide effects in streams--comparative use of species- and family-level biomonitoring data. <i>Environmental Pollution</i> , <b>2009</b> , 157, 1841-8	9.3	81
116	Advancing understanding and prediction in multiple stressor research through a mechanistic basis for null models. <i>Global Change Biology</i> , <b>2018</b> , 24, 1817-1826	11.4	77
115	Towards a unified study of multiple stressors: divisions and common goals across research disciplines. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2020</b> , 287, 20200421	4.4	75
114	Modeling global distribution of agricultural insecticides in surface waters. <i>Environmental Pollution</i> , <b>2015</b> , 198, 54-60	9.3	73
113	Mapping human health risks from exposure to trace metal contamination of drinking water sources in Pakistan. <i>Science of the Total Environment</i> , <b>2015</b> , 538, 306-16	10.2	72
112	The definition of species richness used by species sensitivity distributions approximates observed effects of salinity on stream macroinvertebrates. <i>Environmental Pollution</i> , <b>2011</b> , 159, 302-310	9.3	71
111	Large Scale Risks from Agricultural Pesticides in Small Streams. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 7378-7385	10.3	68
110	Occurrence and toxicity of 331 organic pollutants in large rivers of north Germany over a decade (1994 to 2004). <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 6167-74	10.3	66
109	Calibration of the Chemcatcher passive sampler for monitoring selected polar and semi-polar pesticides in surface water. <i>Environmental Pollution</i> , <b>2008</b> , 155, 52-60	9.3	66
108	Effects of fungicides on decomposer communities and litter decomposition in vineyard streams. <i>Science of the Total Environment</i> , <b>2015</b> , 533, 40-8	10.2	61
107	Review on environmental alterations propagating from aquatic to terrestrial ecosystems. <i>Science of the Total Environment</i> , <b>2015</b> , 538, 246-61	10.2	61
106	Salt in freshwaters: causes, effects and prospects - introduction to the theme issue. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2018</b> , 374,	5.8	60
105	Performance of the Chemcatcher passive sampler when used to monitor 10 polar and semi-polar pesticides in 16 Central European streams, and comparison with two other sampling methods. <i>Water Research</i> , <b>2008</b> , 42, 2707-17	12.5	59
104	Contribution of organic toxicants to multiple stress in river ecosystems. <i>Freshwater Biology</i> , <b>2016</b> , 61, 2116-2128	3.1	59
103	How to characterize chemical exposure to predict ecologic effects on aquatic communities?. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 7996-8004	10.3	56
102	Effects of repeated salt pulses on ecosystem structure and functions in a stream mesocosm. <i>Science of the Total Environment</i> , <b>2014</b> , 476-477, 634-42	10.2	55
101	Water quality indices across Europe--a comparison of the good ecological status of five river basins. <i>Journal of Environmental Monitoring</i> , <b>2007</b> , 9, 970-8		55

100	Specifics and challenges of assessing exposure and effects of pesticides in small water bodies. <i>Hydrobiologia</i> , <b>2017</b> , 793, 213-224	2.4	50
99	Future pesticide risk assessment: narrowing the gap between intention and reality. <i>Environmental Sciences Europe</i> , <b>2019</b> , 31,	5	47
98	Aquatic passive sampling of a short-term thiacloprid pulse with the Chemcatcher: impact of biofouling and use of a diffusion-limiting membrane on the sampling rate. <i>Journal of Chromatography A</i> , <b>2008</b> , 1203, 1-6	4.5	45
97	Water quality variables and pollution sources shaping stream macroinvertebrate communities. <i>Science of the Total Environment</i> , <b>2017</b> , 587-588, 1-10	10.2	43
96	Calibration and field application of passive sampling for episodic exposure to polar organic pesticides in streams. <i>Environmental Pollution</i> , <b>2014</b> , 194, 196-202	9.3	42
95	Regulatory FOCUS surface water models fail to predict insecticide concentrations in the field. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 8397-404	10.3	41
94	Modelling survival: exposure pattern, species sensitivity and uncertainty. <i>Scientific Reports</i> , <b>2016</b> , 6, 291789	7.9	40
93	Effects of anthropogenic salinization on biological traits and community composition of stream macroinvertebrates. <i>Science of the Total Environment</i> , <b>2014</b> , 468-469, 943-9	10.2	38
92	Do predictions from Species Sensitivity Distributions match with field data?. <i>Environmental Pollution</i> , <b>2014</b> , 189, 126-33	9.3	38
91	Towards stressor-specific macroinvertebrate indices: Which traits and taxonomic groups are associated with vulnerable and tolerant taxa?. <i>Science of the Total Environment</i> , <b>2018</b> , 619-620, 144-154	10.2	36
90	Contribution of waste water treatment plants to pesticide toxicity in agriculture catchments. <i>Ecotoxicology and Environmental Safety</i> , <b>2017</b> , 145, 135-141	7	35
89	Using silicone passive samplers to detect polycyclic aromatic hydrocarbons from wildfires in streams and potential acute effects for invertebrate communities. <i>Water Research</i> , <b>2010</b> , 44, 4590-600	12.5	35
88	Effects of salinity on leaf breakdown: Dryland salinity versus salinity from a coalmine. <i>Aquatic Toxicology</i> , <b>2016</b> , 177, 425-32	5.1	34
87	Using ecological production functions to link ecological processes to ecosystem services. <i>Integrated Environmental Assessment and Management</i> , <b>2017</b> , 13, 52-61	2.5	33
86	Salinity impacts on river ecosystem processes: a critical mini-review. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2018</b> , 374,	5.8	31
85	Physiological sensitivity of freshwater macroinvertebrates to heavy metals. <i>Environmental Toxicology and Chemistry</i> , <b>2012</b> , 31, 1754-64	3.8	30
84	Ecotoxicology is not normal: A comparison of statistical approaches for analysis of count and proportion data in ecotoxicology. <i>Environmental Science and Pollution Research</i> , <b>2015</b> , 22, 13990-9	5.1	29
83	Risk assessment of salinity and turbidity in Victoria (Australia) to stream insects' community structure does not always protect functional traits. <i>Science of the Total Environment</i> , <b>2012</b> , 415, 61-8	10.2	28

82	Comparison of dilution factors for German wastewater treatment plant effluents in receiving streams to the fixed dilution factor from chemical risk assessment. <i>Science of the Total Environment</i> , <b>2017</b> , 598, 805-813	10.2	27
81	Pesticides are the dominant stressors for vulnerable insects in lowland streams. <i>Water Research</i> , <b>2021</b> , 201, 117262	12.5	27
80	Assessing the Mixture Effects in Bioassays of Chemicals Occurring in Small Agricultural Streams during Rain Events. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 8280-8290	10.3	25
79	Aquatic prey subsidies to riparian spiders in a stream with different land use types. <i>Limnologica</i> , <b>2015</b> , 51, 1-7	2	24
78	Impacts of Pesticides on Freshwater Ecosystems <b>2011</b> , 111-137		24
77	No association between the use of Bti for mosquito control and the dynamics of non-target aquatic invertebrates in French coastal and continental wetlands. <i>Science of the Total Environment</i> , <b>2016</b> , 553, 486-494	10.2	23
76	Two stressors and a community: effects of hydrological disturbance and a toxicant on freshwater zooplankton. <i>Aquatic Toxicology</i> , <b>2013</b> , 127, 9-20	5.1	23
75	An automated, objective and open source tool for stream threshold selection and upstream riparian corridor delineation. <i>Environmental Modelling and Software</i> , <b>2015</b> , 63, 240-250	5.2	22
74	Is there an interaction of the effects of salinity and pesticides on the community structure of macroinvertebrates?. <i>Science of the Total Environment</i> , <b>2012</b> , 437, 121-6	10.2	22
73	Predicting current and future background ion concentrations in German surface water under climate change. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2018</b> , 374,	5.8	22
72	Taxonomic and functional diversity of stream invertebrates along an environmental stress gradient. <i>Ecological Indicators</i> , <b>2017</b> , 81, 235-242	5.8	20
71	Qualifying the effects of single and multiple stressors on the food web structure of Dutch drainage ditches using a literature review and conceptual models. <i>Science of the Total Environment</i> , <b>2019</b> , 684, 727-740	10.2	20
70	Analysing chemical-induced changes in macroinvertebrate communities in aquatic mesocosm experiments: a comparison of methods. <i>Ecotoxicology</i> , <b>2015</b> , 24, 760-9	2.9	20
69	Modelling aquatic exposure and effects of insecticides--application to south-eastern Australia. <i>Science of the Total Environment</i> , <b>2011</b> , 409, 2807-14	10.2	19
68	Evolutionary patterns and physicochemical properties explain macroinvertebrate sensitivity to heavy metals <b>2016</b> , 26, 1249-59		19
67	Do agricultural pesticides in streams influence riparian spiders?. <i>Science of the Total Environment</i> , <b>2019</b> , 660, 126-135	10.2	19
66	An expert-based landscape permeability model for assessing the impact of agricultural management on amphibian migration. <i>Basic and Applied Ecology</i> , <b>2013</b> , 14, 442-451	3.2	18
65	Perspectives from early career researchers on the publication process in ecology in response to Statzner & Resh (2010). <i>Freshwater Biology</i> , <b>2011</b> , 56, 2405-2412	3.1	17

64	Large Scale Relationship between Aquatic Insect Traits and Climate. <i>PLoS ONE</i> , <b>2015</b> , 10, e0130025	3.7	17
63	A similarity-index-based method to estimate chemical concentration limits protective for ecological communities. <i>Environmental Toxicology and Chemistry</i> , <b>2010</b> , 29, 2123-31	3.8	16
62	Assessment of organochlorine pesticides in the Himalayan riverine ecosystems from Pakistan using passive sampling techniques. <i>Environmental Science and Pollution Research</i> , <b>2019</b> , 26, 6023-6037	5.1	16
61	Sublethal effects of imidacloprid on interactions in a tritrophic system of non-target species. <i>Chemosphere</i> , <b>2015</b> , 132, 152-8	8.4	15
60	Relationship between agricultural pesticides and the diet of riparian spiders in the field. <i>Environmental Sciences Europe</i> , <b>2020</b> , 32,	5	15
59	Responses of freshwater macroinvertebrates to pesticides: insights from field studies. <i>Current Opinion in Environmental Science and Health</i> , <b>2019</b> , 11, 1-7	8.1	14
58	Pesticide runoff from energy crops: A threat to aquatic invertebrates?. <i>Science of the Total Environment</i> , <b>2015</b> , 537, 187-96	10.2	14
57	Does nutrient enrichment compensate fungicide effects on litter decomposition and decomposer communities in streams?. <i>Aquatic Toxicology</i> , <b>2016</b> , 174, 169-78	5.1	14
56	Determination of 10 particle-associated multiclass polar and semi-polar pesticides from small streams using accelerated solvent extraction. <i>Chemosphere</i> , <b>2008</b> , 70, 1952-60	8.4	14
55	Limitations of trait-based approaches for stressor assessment: The case of freshwater invertebrates and climate drivers. <i>Global Change Biology</i> , <b>2020</b> , 26, 364-379	11.4	14
54	Towards a general framework for the assessment of interactive effects of multiple stressors on aquatic ecosystems: Results from the Making Aquatic Ecosystems Great Again (MAEGA) workshop. <i>Science of the Total Environment</i> , <b>2019</b> , 684, 722-726	10.2	13
53	Paradise lost? Pesticide pollution in a European region with considerable amount of traditional agriculture. <i>Water Research</i> , <b>2021</b> , 188, 116528	12.5	13
52	Contrasting effects of aquatic subsidies on a terrestrial trophic cascade. <i>Biology Letters</i> , <b>2017</b> , 13,	3.6	11
51	Should ecologists prefer model- over distance-based multivariate methods?. <i>Ecology and Evolution</i> , <b>2020</b> , 10, 2417-2435	2.8	10
50	webchem: An R Package to Retrieve Chemical Information from the Web. <i>Journal of Statistical Software</i> , <b>2020</b> , 93,	7.3	10
49	Small streams-large concentrations? Pesticide monitoring in small agricultural streams in Germany during dry weather and rainfall. <i>Water Research</i> , <b>2021</b> , 203, 117535	12.5	10
48	Fractionation of copper and uranium in organic and conventional vineyard soils and adjacent stream sediments studied by sequential extraction. <i>Journal of Soils and Sediments</i> , <b>2017</b> , 17, 1092-1100	3.4	9
47	Organic matter breakdown in streams in a region of contrasting anthropogenic land use. <i>Science of the Total Environment</i> , <b>2015</b> , 527-528, 179-84	10.2	9

46	An integrated database of stream macroinvertebrate traits for Australia: concept and application. <i>Ecological Indicators</i> , <b>2020</b> , 114, 106280	5.8	9
45	Biodiversity, ecosystem functions and services in environmental risk assessment: introduction to the special issue. <i>Science of the Total Environment</i> , <b>2012</b> , 415, 1-2	10.2	9
44	Effects of hedgerows and riparian margins on aerial web-building spiders in cereal fields. <i>Journal of Arachnology</i> , <b>2015</b> , 43, 400-405	1.1	9
43	Assessment of polychlorinated biphenyls (PCBs) in the Himalayan Riverine Network of Azad Jammu and Kashmir. <i>Chemosphere</i> , <b>2020</b> , 240, 124762	8.4	9
42	Looking beneath the surface: using hydrogeology and traits to explain flow variability effects on stream macroinvertebrates. <i>Ecohydrology</i> , <b>2016</b> , 9, 1480-1495	2.5	8
41	Risk assessment of episodic exposures to chemicals should consider both the physiological and the ecological sensitivities of species. <i>Science of the Total Environment</i> , <b>2012</b> , 441, 213-9	10.2	8
40	Regional-scale lateral carbon transport and CO <sub>2</sub> evasion in temperate stream catchments. <i>Biogeosciences</i> , <b>2017</b> , 14, 5003-5014	4.6	7
39	In response: why we need landscape ecotoxicology and how it could be advanced--an academic perspective. <i>Environmental Toxicology and Chemistry</i> , <b>2014</b> , 33, 1193-4	3.8	7
38	Resilience in ecotoxicology: Toward a multiple equilibrium concept. <i>Environmental Toxicology and Chemistry</i> , <b>2017</b> , 36, 2574-2580	3.8	6
37	Ecotoxicology. <i>Environmental Toxicology and Chemistry</i> , <b>2013</b> , 32, 734-5	3.8	6
36	A global agenda for advancing freshwater biodiversity research. <i>Ecology Letters</i> , <b>2021</b> ,	10	6
35	Effect of Small Impoundments on Leaf Litter Decomposition in Streams. <i>River Research and Applications</i> , <b>2016</b> , 32, 907-913	2.3	6
34	Mechanistic Effect Modeling of Earthworms in the Context of Pesticide Risk Assessment: Synthesis of the FORESEE Workshop. <i>Integrated Environmental Assessment and Management</i> , <b>2021</b> , 17, 352-363	2.5	6
33	Revisiting global trends in freshwater insect biodiversity. <i>Wiley Interdisciplinary Reviews: Water</i> , <b>2021</b> , 8, e1506	5.7	6
32	Does the loss of climate sensitive detritivore species alter leaf decomposition?. <i>Aquatic Sciences</i> , <b>2017</b> , 79, 869-879	2.5	5
31	Meta-analysis on the responses of traits of different taxonomic groups to global and local stressors. <i>Acta Oecologica</i> , <b>2015</b> , 69, 65-70	1.7	5
30	Environmental stressors can enhance the development of community tolerance to a toxicant. <i>Ecotoxicology</i> , <b>2014</b> , 23, 1690-700	2.9	5
29	Assessing recovery of stream insects from pesticides using a two-patch metapopulation model. <i>Science of the Total Environment</i> , <b>2017</b> , 609, 788-798	10.2	5



28	How does habitat connectivity influence the colonization success of a hemimetabolous aquatic insect? - A modeling approach. <i>Ecological Modelling</i> , <b>2020</b> , 416, 108909	3	5
27	Social-ecological interactions in the Draa River Basin, southern Morocco: Towards nature conservation and human well-being using the IPBES framework. <i>Science of the Total Environment</i> , <b>2021</b> , 769, 144492	10.2	5
26	Maximising the clustering coefficient of networks and the effects on habitat network robustness. <i>PLoS ONE</i> , <b>2020</b> , 15, e0240940	3.7	4
25	Invertebrate turnover along gradients of anthropogenic salinisation in rivers of two German regions. <i>Science of the Total Environment</i> , <b>2021</b> , 753, 141986	10.2	4
24	Risk from pesticide mixtures - The gap between risk assessment and reality. <i>Science of the Total Environment</i> , <b>2021</b> , 796, 149017	10.2	4
23	Effects of a Systemic Pesticide Along an Aquatic Tri-Trophic Food Chain. <i>Bulletin of Environmental Contamination and Toxicology</i> , <b>2019</b> , 103, 507-514	2.7	3
22	Optimisation Model of Dispersal Simulations on a Dendritic Habitat Network. <i>Scientific Reports</i> , <b>2019</b> , 9, 8202	4.9	3
21	Methane-derived carbon in the benthic food web in stream impoundments. <i>PLoS ONE</i> , <b>2014</b> , 9, e111392	3.7	3
20	Standartox: Standardizing Toxicity Data. <i>Data</i> , <b>2020</b> , 5, 46	2.3	2
19	Sampling rates for passive samplers exposed to a field-relevant peak of 42 organic pesticides. <i>Science of the Total Environment</i> , <b>2020</b> , 740, 140376	10.2	2
18	Response to comment on "Regulatory FOCUS surface water models fail to predict insecticide concentrations in the field". <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 1179-80	10.3	2
17	Response to comment on "regulatory focus surface water models fail to predict insecticide concentrations in the field". <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 3017-8	10.3	2
16	Three reasons why the Water Framework Directive (WFD) fails to identify pesticide risks. <i>Water Research</i> , <b>2022</b> , 208, 117848	12.5	2
15	Tackling inconsistencies among freshwater invertebrate trait databases: harmonising across continents and aggregating taxonomic resolution. <i>Freshwater Biology</i> ,	3.1	2
14	Encyclopedia of Aquatic Ecotoxicology <b>2013</b> , 1063-1072		2
13	Preparing GIS data for analysis of stream monitoring data: The R package openSTARS. <i>PLoS ONE</i> , <b>2020</b> , 15, e0239237	3.7	2
12	Similar recovery time of microbial functions from fungicide stress across biogeographical regions. <i>Scientific Reports</i> , <b>2018</b> , 8, 17021	4.9	2
11	Mini-review of process-based food web models and their application in aquatic-terrestrial meta-ecosystems. <i>Ecological Modelling</i> , <b>2021</b> , 458, 109710	3	2



10	Ecotoxicology <b>2018</b> , 225-239		1
9	Spatiotemporal dynamics drive synergism of land use and climatic extreme events in insect meta-populations.. <i>Science of the Total Environment</i> , <b>2021</b> , 152602	10.2	1
8	Monitoring Programmes, Multiple Stress Analysis and Decision Support for River Basin Management. <i>Handbook of Environmental Chemistry</i> , <b>2014</b> , 151-182	0.8	1
7	Status and Causal Pathway Assessments Supporting River Basin Management. <i>Handbook of Environmental Chemistry</i> , <b>2014</b> , 53-149	0.8	1
6	Indicators for assessing the robustness of metapopulations against habitat loss. <i>Ecological Indicators</i> , <b>2021</b> , 121, 106809	5.8	1
5	How Toxicants Influence Organic Matter Decomposition in Streams <b>2021</b> , 379-410		1
4	Pesticide effects on macroinvertebrates and leaf litter decomposition in areas with traditional agriculture.. <i>Science of the Total Environment</i> , <b>2022</b> , 154549	10.2	0
3	Potential propagation of agricultural pesticide exposure and effects to upstream sections in a biosphere reserve.. <i>Science of the Total Environment</i> , <b>2022</b> , 155688	10.2	0
2	Preface to the special section Biohydrology - Water for life <i>Ecohydrology</i> , <b>2015</b> , 8, 353-354	2.5	
1	Statistical hypothesis testing--To transform or not to transform?. <i>Integrated Environmental Assessment and Management</i> , <b>2016</b> , 12, 398-400	2.5	