



Publications

Helmholtz Centre for Environmental Research – UFZ

Topic 9: Healthy Planet – Towards a Non-Toxic Environment

Preface

This list includes all publications of the year 2023 assigned to program topic 9 “Healthy Planet – Towards a Non-Toxic Environment” of the Helmholtz research program "Changing Earth – Sustaining our Future" within the research field Earth and Environment which were authored, co-authored or edited by staff members of the Helmholtz Centre for Environmental Research - UFZ.

If a publication belongs to more than one program topic, both primary and secondary assignments are indicated.

The editorial deadline for this publication list was 31 January 2024.

In contrast to external authors, UFZ staff names are highlighted in **bold type** in all publications.

The concluding index lists all UFZ authors in alphabetical order with the sequential numbers of their publications.

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Publications in ISI/Scopus listed journals/series

1. Alava, J.J., **Jahnke, A.**, Bergmann, M., Aguirre-Martínez, G.V., Bendell, L., Calle, P., Domínguez, G.A., Faustman, E.M., Falman, J., Kazmiruk, T.N., Klasios, N., Maldonado, M.T., McMullen, K., Moreno-Báez, M., Öberg, G., Ota, Y., Price, D., Shim, W.J., Tirapé, A., Vandenberg, J.M., Zoveidadianpour, Z., Weis, J. (2023):
A call to include plastics in the global environment in the class of persistent, bioaccumulative, and toxic (PBT) pollutants
Environ. Sci. Technol. **57** (22), 8185 - 8188
2. **Aldehoff, A.S., Karkossa, I., Engelmann, B., Rolle-Kampczyk, U., von Bergen, M., Schubert, K.** (2023):
Exploring the regulatory effects of lysine acetylation and phosphorylation in adipocyte differentiation and their exposure to emerging plastic additives
Toxicol. Lett. **384** (Suppl. 1), S133 - S133
3. Amorim, M.J.B., Peijnenburg, W., Greco, D., Saarimäki, L.A., Dumit, V.I., Bahl, A., Haase, A., Tran, L., **Hackermüller, J., Canzler, S.**, Scott-Fordsmand, J.J. (2023):
Systems toxicology to advance human and environmental hazard assessment: A roadmap for advanced materials
Nano Today **48** , art. 101735
4. Šauer, P., Vrana, B., **Escher, B.I.**, Grabic, R., Toušová, Z., **Krauss, M.**, von der Ohe, P.C., **König, M.**, Grabicová, K., Mikušová, P., Prokeš, R., Sobotka, J., Fialová, P., Novák, J., **Brack, W.**, Hilscherová, K. (2023):
Bioanalytical and chemical characterization of organic micropollutant mixtures in long-term exposed passive samplers from the Joint Danube Survey 4: Setting a baseline for water quality monitoring
Environ. Int. **178** , art. 107957
5. **Avila Santos, A.P., Kabiru Nata'ala, M., Kasmanas, J.C.**, Bartholomäus, A., Keller-Costa, T., **Jurburg, S.D., Tal, T.**, Camarinha-Silva, A., **Saraiva, J.P.**, de Carvalho, A.C.P.L.F., Stadler, P.F., **Sipoli Sanches, D., Nunes da Rocha, U.** (2023):
The AnimalAssociatedMetagenomeDB reveals a bias towards livestock and developed countries and blind spots in functional-potential studies of animal-associated microbiomes
Animal Microbiome **5** , art. 48
Main topic T7; Secondary topic T9
6. **Ayuk, H.S., Arnold, S., Bauer, M., Stadtmüller, M., Lindemann, D., Stojanovska, V., Zenclussen, A.** (2023):
Entry points for SARS-CoV-2 in trophoblast cells and possible mechanisms of resistance
Placenta **140** , e53

7. Bajard, L., Adamovsky, O., Audouze, K., Baken, K., Barouki, R., Beltman, J.B., Beronius, A., Bonefeld-Jørgensen, E.C., Cano-Sancho, G., de Baat, M.L., Di Tillio, F., Fernández, M.F., FitzGerald, R.E., Gundacker, C., Hernández, A.F., Hilscherova, K., Karakitsios, S., Kuchovska, E., Long, M., Luijten, M., Majid, S., Marx-Stoelting, P., Mustieles, V., Negi, C.K., Sarigiannis, D., **Scholz, S.**, Sovadinova, I., Stierum, R., Tanabe, S., Tollefsen, K.E., van den Brand, A.D., Vogs, C., Wielsøe, M., Wittwehr, C., Blaha, L. (2023):
Application of AOPs to assist regulatory assessment of chemical risks – Case studies, needs and recommendations
Environ. Res. **217** , art. 114650

8. **Balda, M., Mackenzie, K., Wosidlo, S., Uhlig, H., Möllmer, J., Kopinke, F.-D., Schüürmann, G., Georgi, A.** (2023):
Bottom-up synthesis of de-functionalized and dispersible carbon spheres as colloidal adsorbent
Int. J. Mol. Sci. **24** (4), art. 3831
Main topic T7; Secondary topic T9

9. Barrow, K., **Escher, B.I.**, Hicks, K.A., **König, M., Schlichting, R.**, Arlos, M.J. (2023):
Water quality monitoring with *in vitro* bioassays to compare untreated oil sands process-affected water with unimpacted rivers
Environ. Sci.-Wat. Res. Technol. **9** (8), 2008 - 2020

10. Bashirova, N., Poppitz, D., **Klüver, N., Scholz, S.**, Matysik, J., Alia, A. (2023):
A mechanistic understanding of the effects of polyethylene terephthalate nanoplastics in the zebrafish (*Danio rerio*) embryo
Sci. Rep. **13** , art. 1891

11. **Bauer, M.** (2023):
Interplay between toxicants, natural toxins, and the immune system in animal models. Editorial
Front. Immunol. **14** , art. 1186300

12. **Beckers, L.-M., Altenburger, R., Brack, W., Escher, B.I., Hackermüller, J., Hassold, E., Illing, G., Krauss, M., Krüger, J., Michaelis, P., Schüttler, A., Stevens, S., Busch, W.** (2023):
A data-derived reference mixture representative of European wastewater treatment plant effluents to complement mixture assessment
Environ. Int. **179** , art. 108155

13. Bein, E., **Seiwert, B., Reemtsma, T.**, Drewes, J.E., Hübner, U. (2023):
Advanced oxidation processes for removal of monocyclic aromatic hydrocarbon from water: Effects of O₃/H₂O₂ and UV/H₂O₂ treatment on product formation and biological post-treatment
J. Hazard. Mater. **450** , art. 131066

14. Bellver-Domingo, Á., Fuentes, R., Hernández-Sancho, F., **Carmona, E.**, Picó, Y., Hernández-Chover, V. (2023):
MCDA-DEA approach to construct a composite indicator for effluents from WWTPs considering the influence of PPCPs
Environ. Sci. Pollut. Res. **30** (16), 47234 - 47247

15. Bifari, F., Dolci, S., Mannino, L., Campanelli, A., Bottani, E., **Karkossa, I.**, Setten, E., Gianoli, S., Di Chio, M., Ciarpella, F., Busetto, G., Pezzotta, A., Castagna, A., Pruonto, G., Binaschi, L., Amenta, A., Scupoli, M., Cavallini, C., Boschi, F., Doherty, A., Malpeli, G., Rossi, E., Martinelli, N., Ferretti, S., Malik, Z., Sandri, M., Pistocchi, A., **Schubert, K.**, Endrizzi, M., Bossolasco, P., Fumagalli, G., Locati, M., Decimo, I. (2023):
Adoptive transfer of tumor-educated macrophages promote neural tissue regeneration and motor recovery following severe spinal cord injury
Cytotherapy **25** (6, Suppl.), E8 - E9

16. **Böhme, A., Ulrich, N., Schüürmann, G.** (2023):
Amino chemoassay profiling of aromatic aldehydes—unraveling drivers of their skin sensitization potency
Chem. Res. Toxicol. **36** (7), 1055 - 1070

17. **Bonatelli, M.L., Rohwerder, T., Popp, D., Liu, Y., Akay, C., Schultz, C., Liao, K.-P., Ding, C., Reemtsma, T., Adrian, L., Kleinsteinuber, S.** (2023):
Recently evolved combination of unique sulfatase and amidase genes enables bacterial degradation of the wastewater micropollutant acesulfame worldwide
Front. Microbiol. **14** , art. 1223838
Main topic T7; Secondary topic T9

18. Braeuning, A., Balaguer, P., Bourguet, W., Carreras-Puigvert, J., Feiertag, K., Kamstra, J.H., Knapen, D., Lichtenstein, D., Marx-Stoelting, P., Rietdijk, J., **Schubert, K.**, Spjuth, O., Stinckens, E., Thedieck, K., van den Boom, R., Vergauwen, L., **von Bergen, M.**, Wewer, N., Zalko, D. (2023):
Development of new approach methods for the identification and characterization of endocrine metabolic disruptors—a PARC project
Front. Toxicol. **5** , art. 1212509

19. **Braun, G., Escher, B.I.** (2023):
Prioritization of mixtures of neurotoxic chemicals for biomonitoring using high-throughput oxicokinetics and mixture toxicity modeling
Environ. Int. **171** , art. 107680

20. **Braun, G., Krauss, M., Escher, B.I.** (2023):
Recovery of 400 chemicals with three extraction methods for low volumes of human plasma quantified by instrumental analysis and in vitro bioassays
Environ. Sci. Technol. **57** (48), 19363 - 19373

21. Bray, S., Chilton, J., **Bernt, M.**, Soranzo, N., van den Beek, M., Batut, B., Rasche, H., Čech, M., Cock, P.J.A., Grüning, B., Nekrutenko, A. (2023):
The Planemo toolkit for developing, deploying, and executing scientific data analyses in Galaxy and beyond
Genome Res. **33** , 261 - 268

22. **Buchenauer, L., Haange, S.-B., Bauer, M., Rolle-Kampczyk, U.E., Wagner, M., Stucke, J., Elter, E., Fink, B.,** Vass, M., **von Bergen, M.,** Schulz, A., **Zenclussen, A.C., Junge, K.M.,** Stangl, G.I., **Polte, T.** (2023):
Maternal exposure of mice to glyphosate induces depression- and anxiety-like behavior in the offspring via alterations of the gut-brain axis
Sci. Total Environ. **905** , art. 167034

23. Caracciolo, R., **Escher, B.I.,** Lai, F.Y., Nguyen, T.A., Le, T.M.T., **Schlichting, R.,** Tröger, R., Némery, J., Wiberg, K., Nguyen, P.D., Baduel, C. (2023):
Impact of a megacity on the water quality of a tropical estuary assessed by a combination of chemical analysis and *in-vitro* bioassays
Sci. Total Environ. **877** , art. 162525

24. Carere, M., Lacchetti, I., di Domenico, K., Cristiano, W., Mancini, L., De Felip, E., Ingelido, A.M., **Massei, R.,** Tancioni, L. (2023):
Fish-kills in the urban stretch of the Tiber river after a flash-storm: Investigative monitoring with effect-based methods, targeted chemical analyses, and fish assemblage examinations
Water Air Soil Pollut. **234** (3), art. 159

25. Carido, M., Völkner, M., **Steinheuer, L.M.,** Wagner, F., Kurth, T., Dumler, N., Ulusoy, S., Wieneke, S., Nornliella, A.V., Golfieri, C., Khattak, S., Schönfelder, B., Scamozzi, M., Zoschke, K., **Canzler, S., Hackermüller, J.,** Ader, M., Karl, M.O. (2023):
Reliability of human retina organoid generation from hiPSC-derived neuroepithelial cysts
Front. Cell. Neurosci. **17** , art. 1166641

26. **Carmona, E., Rojo-Nieto, E., Rummel, C.D., Krauss, M.,** Syberg, K., Ramos, T.M., Brosche, S., Backhaus, T., Carney Almroth, B. (2023):
A dataset of organic pollutants identified and quantified in recycled polyethylene pellets
Data Brief **51** , art. 109740

27. Cerdó, T., Ruiz-Rodríguez, A., Acuña, I., Torres-Espínola, F.J., Menchén-Márquez, S., Gámiz, F., Gallo, M., **Jehmlich, N., Haange, S.-B., von Bergen, M.,** Campoy, C., Suárez, A. (2023):
Infant gut microbiota contributes to cognitive performance in mice
Cell Host Microbe **31** (12), 1974 - 1988.e4

28. Cheng, F., Huang, J., Li, H., **Escher, B.I.**, Tong, Y., **König, M.**, Wang, D., Wu, F., Yu, Z., Brooks, B.W., You, J. (2023):
Text mining-based suspect screening for aquatic risk assessment in the big data era: Event-driven taxonomy links chemical exposures and hazards
Environ. Sci. Technol. Lett. **10** (11), 1004 - 1010

29. Colbourne, J.K., Andrews, E., Barnard, M., Čavoški, A., Chaturvedi, A., Epps, D.J.T., Holden, L., Jones, M.R., Li, X., Mueller, F., Ormanin-Lewandowska, A., Orsini, L., Roberts, R., Weber, R.J.M., Zhou, J., Apic, G., Ignasiak, T., Jankovic, K., Krsmanovic, T., Leoni, B., Asole, G., Guigó, R., Marangio, P., Palumbo, E., Perez-Lluch, S., Wucher, V., Vlot, A.H., Anholt, R., Mackay, T., **Escher, B.I.**, **Grasse, N.**, **Huchthausen, J.**, **Massei, R.**, **Reemtsma, T.**, **Scholz, S.**, **Schüürmann, G.**, Bondesson, M., Cherbas, P., et al. (2023):
The Precision Toxicology initiative
Toxicol. Lett. **383** , 33 - 42
Main topic T9; Secondary topic T5

30. Cramer von Clausbruch, C.A., Weiss, C., Dickmeis, T., Peravali, R., Strähle, U., Colbourne, J., Hayot, G., **Scholz, S.**, Martinez Lopez, R. (2023):
Quantitative and qualitative assessment of cytotoxicity by automated fluorescence microscopy in human hepatocytes
Naunyn-Schmiedeberg's Arch. Pharmacol. **396** (Suppl. 1), S61 - S62

31. **Dahley, C.**, **Goss, K.-U.**, **Ebert, A.** (2023):
Revisiting the pK_a-Flux method for determining intrinsic membrane permeability
Eur. J. Pharm. Sci. **191** , art. 106592

32. De Castelbajac, T., Aiello, K., Arenas, C.G., Svingen, T., Ramhøj, L., Zalko, D., Barouki, R., Vanhaecke, T., Rogiers, V., Audebert, M., Oelgeschlaeger, M., Braeuning, A., Blanc, E., **Tal, T.**, Rüegg, J., Fritsche, E., Marx-Stoelting, P., Rivière, G. (2023):
Innovative tools and methods for toxicity testing within PARC work package 5 on hazard assessment
Front. Toxicol. **5** , art. 1216369

33. Dürig, W., Lindblad, S., Golovko, O., Gkotsis, G., Aalizadeh, R., Nika, M.-C., Thomaidis, N., Alygizakis, N.A., Plassmann, M., Haglund, P., **Fu, Q.**, Hollender, J., Chaker, J., David, A., Kunkel, U., Macherius, A., Belova, L., Poma, G., Preud'Homme, H., Munsch, C., Aminot, ., Jaeger, C., Lisec, J., Hansen, M., Vorkamp, K., Zhu, L., Cappelli, F., Roscioli, C., Valsecchi, S., Bagnati, R., González, B., Prieto, A., Zuloaga, O., Gil-Solsona, R., Gago-Ferrero, P., Rodriguez-Mozaz, S., Budzinski, H., Devier, M.-H., Dierkes, G., Boulard, L., Jacobs, G., Voorspoels, S., Rüdél, H., Ahrens, L. (2023):
What is in the fish? Collaborative trial in suspect and non-target screening of organic micropollutants using LC- and GC-HRMS
Environ. Int. **181** , art. 108288

34. **Ebert, A., Ackermann, J., Goss, K.-U.** (2023):
Mechanistic modeling of the bioconcentration of (super)hydrophobic compounds in *Hyaella azteca*
Environ. Sci. Pollut. Res. **30** (17), 50257 - 50268

35. **Ebert, R.-U., Kühne, R., Schüürmann, G.** (2023):
Henry's law constant—A general-purpose fragment model to predict log K_{aw} from molecular structure
Environ. Sci. Technol. **57** (1), 160 - 167

36. **Ebert, R.-U., Kühne, R., Schüürmann, G.** (2023):
Octanol/air partition coefficient - A general-purpose fragment model to predict log K_{oa} from molecular structure
Environ. Sci. Technol. **57** (2), 976 - 984

37. Enault, J., Loret, J.-F., Neale, P.A., de Baat, M.L., **Escher, B.I.**, Belhadj, F., Kools, S.A.E., Pronk, G.J., Leusch, F.D.L. (2023):
How effective are water treatment processes in removing toxic effects of micropollutants? A literature review of effect-based monitoring data
J. Water Health **21** (2), 235 - 250

38. Engelberts, J.P., Robbins, S.J., Herbold, C.W., Moeller, F.U., **Jehmlich, N.**, Laffy, P.W., Wagner, M., Webster, N.S. (2023):
Metabolic reconstruction of the near complete microbiome of the model sponge *Ianthella basta*
Environ. Microbiol. **25** (3), 646 - 660

39. **Escher, B.I., Altenburger, R.**, Blüher, M., Colbourne, J.K., Ebinghaus, R., Fantke, P., **Hein, M., Köck, W.**, Kümmerer, K., **Leipold, S.**, Li, X., Scheringer, M., **Scholz, S.**, Schlöter, M., Schweizer, P.-J., **Tal, T.**, Tetko, I., Traidl-Hoffmann, C., **Wick, L.Y.**, Fenner, K. (2023):
Modernizing persistence–bioaccumulation–toxicity (PBT) assessment with high throughput animal-free methods
Arch. Toxicol. **97** (5), 1267 - 1283
Main topic T9; Secondary topics T5, T7

40. **Escher, B.I.**, Binnington, M.J., **König, M.**, Lei, Y.D., Wania, F. (2023):
Mixture effect assessment applying *in vitro* bioassays to in-tissue silicone extracts of traditional foods prepared from beluga whale blubber
Environ. Sci.-Process Impacts **25** (11), 1759 - 1770

41. Fang, M., Li, L., Tian, Z., **Escher, B.** (2023):
Introduction to the “Tracking complex mixtures of chemicals in human- and eco-exposome: the nexus of models, analytics, and toxicity” themed issue
Environ. Sci.-Process Impacts **25** (11), 1741 - 1742

42. Farag, M.A., Baky, M.H., **von Bergen, M.**, Hegazi, N.M. (2023):
The use of omics in monitoring food gut microbiota interaction outcomes: a review of novel trends and technologies
Curr. Opin. Food Sci. **52** , art. 101064
43. Farag, M.A., **von Bergen, M.**, Shao, P., Güven, E.Ç. (2023):
How do food and drugs interact with gut microbiota? Toward better or worse health outcomes. Editorial
J. Adv. Res. **52** , 1 - 1
44. Farani, M.R., Sarlak, M., Gholami, A., **Azarian, M.**, Binabaj, M.M., Kakavandi, S., Tambuwala, M.M., Taheriazam, A., Hashemi, M., Ghasemi, S. (2023):
Epigenetic drugs as new emerging therapeutics: What is the scale's orientation of application and challenges?
Pathol. Res. Pract. **248** , art. 154688
45. Fiedler, L., **Bernt, M.**, Middendorf, M., Stadler, P.F. (2023):
Detecting gene breakpoints in noisy genome sequences using position-annotated colored de-Bruijn graphs
BMC Bioinformatics **24** , art. 235
46. Fiedler, L., Middendorf, M., **Bernt, M.** (2023):
Fully automated annotation of mitochondrial genomes using a cluster-based approach with de Bruijn graphs
Front. Genet. **14** , art. 1250907
47. **Fischer, F., Ermer, M.R., Howanski, J., Zenclussen, A.C., Schumacher, A.** (2023):
Bisphenol A and benzophenone-3, two ubiquitous endocrine disruptors, may interfere with tolerance pathways by disturbing the T cell equilibrium
Am. J. Reprod. Immunol. **89** (S1), 83 - 83
48. **Fischer, F., Zenclussen, A.C., Meyer, N.** (2023):
Gefährdung durch Alltagschemikalien: Ein Impuls für die Schwangerschaftsvorsorge.
Hazards due to everyday chemicals: An impulse for prenatal care
Gynäkologie **56** (9), 633 - 640
49. Flach, H., Dietmann, P., **Liess, M.**, Köhl, M., Köhl, S.J. (2023):
Glyphosate without Co-formulants affects embryonic development of the south african clawed frog *Xenopus laevis*
Ecotox. Environ. Safe. **260** , art. 115080
50. **Foscari, A., Schmidt, N., Seiwert, B., Herzke, D., Sempéré, R., Reemtsma, T.** (2023):
Leaching of chemicals and DOC from tire particles under simulated marine conditions
Front. Environ. Sci. **11** , art. 1206449

51. Gant, T.W., Auerbach, S.S., **von Bergen, M.**, Bouhifd, M., Botham, P.A., Caiment, F., Currie, R.A., Harrill, J., Johnson, K., Li, D., Rouquie, D., van Ravenzwaay, B., Sistare, F., Tralau, T., Viant, M.R., van de Laan, J.W., Yauk, C. (2023):
Applying genomics in regulatory toxicology: a report of the ECETOC workshop on omics threshold on non-adversity
Arch. Toxicol. **97** (8), 2291 - 2302

52. **Genz, P.**, Katayama, V.T., **Reemtsma, T.** (2023):
Retention of organic micropollutants in nutrient recovery from centrate by electrodialysis—Influence of feed pH and current density
ACS ES&T Water **3** (12), 4066 - 4073

53. **Gerhards, M.**, **Böhme, A.**, **Schubert, K.**, **Kodritsch, B.**, **Ulrich, N.** (2023):
DNA adducts as link between *in vitro* and *in vivo* carcinogenicity – A case study with benzo[a]pyrene
Curr. Res. Toxicol. **4** , art. 100097

54. Glaser, L., **Escher, B.I.**, Engelhardt, M., Liu, Y., **Krauss, M.**, **König, M.**, **Schlichting, R.**, Zarfl, C., Spahr, S. (2023):
Particle-associated organic contaminant and cytotoxicity transport in a river during storm events
J. Hydrol. **621** , art. 129600

55. **Glüge, J.**, **Escher, B.I.**, Scheringer, M. (2023):
How error-prone bioaccumulation experiments impact the risk assessment of hydrophobic chemicals and what could be improved
Integr. Environ. Assess. Manag. **19** (3), 792 - 803

56. **Glüge, J.**, McNeill, K., Scheringer, M. (2023):
Getting the SMILES right: identifying inconsistent chemical identities in the ECHA database, PubChem and the CompTox Chemicals Dashboard
Environmental Science-Advances **2** (4), 612 - 621

57. **Goss, K.-U.** (2023):
Reply to the commentary on “Mantrailing as evidence in court?” [Forensic Sci. Int. Rep. 3 (2021) 100204]
Forensic Sci. Int. Rep. **7** , art. 100308

58. **Grasse, N.**, **Seiwert, B.**, **Massei, R.**, **Scholz, S.**, **Fu, Q.**, **Reemtsma, T.** (2023):
Uptake and biotransformation of the tire rubber-derived contaminants 6-PPD and 6-PPD quinone in the zebrafish embryo (*Danio rerio*)
Environ. Sci. Technol. **57** (41), 15598 - 15607
Main topic T9; Secondary topic T5

59. Guckert, M., **Rupp, J.**, Nürenberg, G., Nödler, K., Koschorreck, J., **Berger, U.**, Drost, W., Siebert, U., Wibbelt, G., **Reemtsma, T.** (2023):
Differences in the internal PFAS patterns of herbivores, omnivores and carnivores - lessons learned from target screening and the total oxidizable precursor assay
Sci. Total Environ. **875** , art. 162361

60. Gurbuz, B., Guldiken, N., Reuken, P., Fu, L., Remih, K., Preisinger, C., Brůha, R., Leníček, M., Petrtyl, J., Reissing, J., Aly, M., Fromme, M., Zhou, B., **Karkossa, I.**, **Schubert, K.**, **von Bergen, M.**, Stallmach, A., Bruns, T., Strnad, P. (2023):
Biomarkers of hepatocellular synthesis in patients with decompensated cirrhosis
Hepatol. Int. **17** (3), 698 - 708

61. **Hajduk, A.**, **Ulrich, N.** (2023):
Determination of acidity constants of pyridines, imidazoles, and oximes by capillary electrophoresis
Electrophoresis **44** (17-18), 1353 - 1360

62. **Han, L.**, **Lohse, M.**, **Nihemaiti, M.**, **Reemtsma, T.**, **Lechtenfeld, O.J.** (2023):
Direct non-target analysis of dissolved organic matter and disinfection by-products in drinking water
with nano-LC-FT-ICR-MS
Environ. Sci.-Wat. Res. Technol. **9** (6), 1729 - 1737

63. Hayot, G., von Clausbruch, C., Martinez Lopez, R., **Scholz, S.**, Colbourne, J., Strähle, U., Weiss, C., Peravali, R., Dickmeis, T. (2023):
Phenotypic anchoring for OMICS-guided assessment of liver toxicity in zebrafish
Naunyn-Schmiedeberg's Arch. Pharmacol. **396** (Suppl. 1), S61 - S61

64. Heinze, B.M., Küsel, K., **Jehmlich, N.**, **von Bergen, M.**, Taubert, M. (2023):
Metabolic versatility enables sulfur-oxidizers to dominate primary production in groundwater
Water Res. **244** , art. 120426

65. Hendriks, L., Brünjes, H., Taskula, S., Kocic, J., Hattendorf, B., Bland, G., Lowry, G., Bolea-Fernandez, E., Vanhaecke, F., Wang, J., Baalousha, M., von der Au, M., Meermann, B., **Holbrook, T.R.**, **Wagner, S.**, Harycki, S., Gundlach-Graham, A., von der Kammer, F. (2023):
Results of an interlaboratory comparison for characterization of Pt nanoparticles using single-particle ICP-TOFMS
Nanoscale **15** (26), 11268 - 11279

66. **Herzsprung, P., Kamjunke, N., Wilske, C., Friese, K., Boehrer, B., Rinke, K., Lechtenfeld, O.J., von Tümpling, W.** (2023):
Data evaluation strategy for identification of key molecular formulas in dissolved organic matter as proxies for biogeochemical reactivity based on abundance differences from ultrahigh resolution mass spectrometry
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Main topic T5; Secondary topic T9

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The majority of Germany's small agricultural streams are in poor ecological status
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