

Prof. Dr. Henner Hollert

Department for Ecosystem Analyses
Institute of Environmental Research at the RWTH Aachen University



Research Profile

Curriculum vitae

Name: Univ.-Prof. Dr.rer.nat. Henner Hollert
Address: Institute für Umweltforschung
Worringer Weg 1
52074 Aachen
Germany
Date and Place of Birth: 25th May, 1969, Bensheim, Germany
Nationality: German

Current Position

- Director of the Institute for Environmental Research, RWTH Aachen University (together with Prof. Dr. Andreas Schäffer)
- Dean of the School of Biology and Biotechnology at RWTH Aachen University
- Professor for Ecosystem Analyses at the Institute for Environmental Research, RWTH Aachen University, Faculty of Mathematics, Informatics and Natural Sciences
- Board member of the Institute for Ecosystem Analysis gaiac, Aachen, a SME
- Adjunct Professor Chongqing -University, China
- Concurrent Professor, Nanjing- University, China
- Honorary Professor • 111 Program, College of Environmental Science and Engineering and State Key Laboratory of Pollution Control and Resource Reuse, Tongji University, China
- Editor-in-Chief Environ Sci Europe, Springer Publishers
- Editor- Environ Sci Poll Res, Springer Publishers
- Editor -J. Soils Sediments, Springer Publishers
- Editorial Board Journal Environmental Sciences- JES, Chinese Academy of Sciences

Academic Qualifications

1997 Diplom in Biology (University of Heidelberg)
1997 1. Staatsexamen für Lehramt / Biology & Geography (University of Heidelberg)

2001 Dr. rer. nat. (Summa cum laude, supported by the "Studienstiftung des Deutschen Volkes", University of Heidelberg)

Professional Career

2007 W2 Professor at RWTH, Head of the Department for Ecosystem Analyses (ESA), Institute of Environmental Research (Biology V), Aachen University, Germany

2007 Director of the Institute of Environmental Research (together with Prof. Dr. Andreas Schäffer)

2007 Board Member Gaiac, Institute for Ecosystem Analysis, Aachen

2001-2007 Assistant professor at the Ruprecht-Karls University in Heidelberg, Germany, Department for Zoology

Memberships and professional development

since 2014 Dean of the faculty of Biology and Biotechnology at RWTH Aachen University

since 2012 Chair of the working bioassays in the Norman Network on European Reference laboratories

since 2012 Chair of the working bioassays in the Norman Network on European Reference laboratories

since 2012 member of the CMEP drafting group on effect based tools of the European Commission

since 2012 Editorial Board Journal of Chongqing Normal University

since 2011 Member in the Norman Network on European Reference laboratories

since 2011 Editor in Chief of Environ Sci Europe – the first Open Access Journal of Springer Publishers in Environmental Sciences (<http://www.enveurope.com/>)

since 2010 Organizing committee of the German-American Frontiers of Science Symposia (US National Academy of Science and Humboldt Foundation) 2011 and 2012

since 2010 Core group member BioSC (Bioeconomy Science Centre; <http://www.biosc.de/>)

since 2001 Council member of the Society Environmental Toxicology and Chemistry, Europe-German Language Branch (president in 2004)

since 2005 steering committee of the Worldwide SETAC/SedNet Sediment Advisory group

since 2009: Editor of Environ Sci & Pollut Res

2005 – 2010 Editor-in-Chief of the German language journal UWSF - Z Umweltchem Ökotox

2005 – 2008 Principal Subject Editor Environ Sci & Pollut Res (Terrestrial Ecology and Biology/Soil and Sediment: Toxicology-related subjects)

since 2005 Advisory Board of the Postgraduate Programme *Geprüfter Fachökotoxikologe SETAC/GDCh* (<http://www.fachokotoxikologie.de>)

since 2005 Subject Editor JSS - J Soils & Sediments

2005 3rd Prize within the Best Publication Award competition of the Society of Environmental Toxicology and Chemistry (SETAC – Europe)

Since 2001 Henner Hollert is reviewing for over 20 national and international journals

Honors and Awards

- 2011 Kerstin Bluhm (from my group) was awarded 1st place of the Ph.D student Platform Presentation Award at the SETAC North America 32nd Annual Meeting 2011 in Boston, which had been attended by more than 2000 experts from ecotoxicology and environmental chemistry
- 2011 Award for excellent teaching at RWTH University
- Since 2008 awarded as PI in the Cluster of Excellence "Tailormade Fuels from Biomass" funded by the German Excellence Initiative
- 2007-2011 Henner Hollert was the 2nd most cited researcher from German language countries in the field of Ecotoxicology in a survey of *Laborjournal* based on ISI Thompson evaluations
- 2008 – 2012 Awarded to attend the German-American Frontiers of Science Symposia (US National Academy of Science and Humboldt Foundation)
- 2008 nominated by the rector of the RWTH Aachen University, Prof. Dr. John Giesy (Canada) and Prof. Dr. Al Young (USA) for the Krupp Award.
- 2001 The PhD-thesis was supported by the Studienstiftung des Deutschen Volkes
- 2004 3rd Prize within the Best Publication Award competition of the Society of Environmental Toxicology and Chemistry (SETAC – Europe) for Hollert et al, 2003 (JSS).

Dr. Hollerts Diploma Students have been awarded in the years 2004, 2005, 2006, 2007 and 2008 for the best German Diploma theses by the SETAC German Language branch (Thomas Kosmehl 2004, Thomas Seiler 2005, Nadja Seitz 2006, Stefanie Grund 2007, Hanno Zielke 2008). In 2011 his PhD student Kerstin Bluhm received the 1.Prize for the best oral presentation during a SETAC North America Meeting

Organisation of Scientific Meetings within the last two years

- 2012 Organizing Committee Processes in the Yangtze River System - 10th Anniversary of Sino-German Cooperation-September 22-23, Tongji University, Shanghai, China, Sept. 2012
- 2012 Chair of the Local Organizing committee and member of the scientific committee; World Meeting of the Society of Environmental toxicology and Chemistry (SETAC) with 2600 participants
- 2012 Chair of the German-American Frontiers of Science Symposia (US National Academy of Science and Humboldt Foundation), Potsdam, Macrobiology Session
- 2011 Organizing Committee German Chinese Workshop, RWTH – Chongqing University, 2011
- 2011 Chair of the Biofuels Session, Annual Meeting SETAC North America
- 2011 Co-Organization Round table discussion on the role of ecotoxicology from the National research Foundation

- 2011 Organizing Committee German Chinese Workshop, Institut für Umweltforschung RWTH Aachen, Tongji University Shanghai, Forschungszentrum Jülich 27. - 29. Nov 2011
- 2011 Organizing Committee German Chinese Workshop, RWTH - Tongji University Shanghai, Spring 2011
- 2010 Organizing Committee German Chinese Workshop, RWTH – Chongqing University, 2010

Scientific Projects

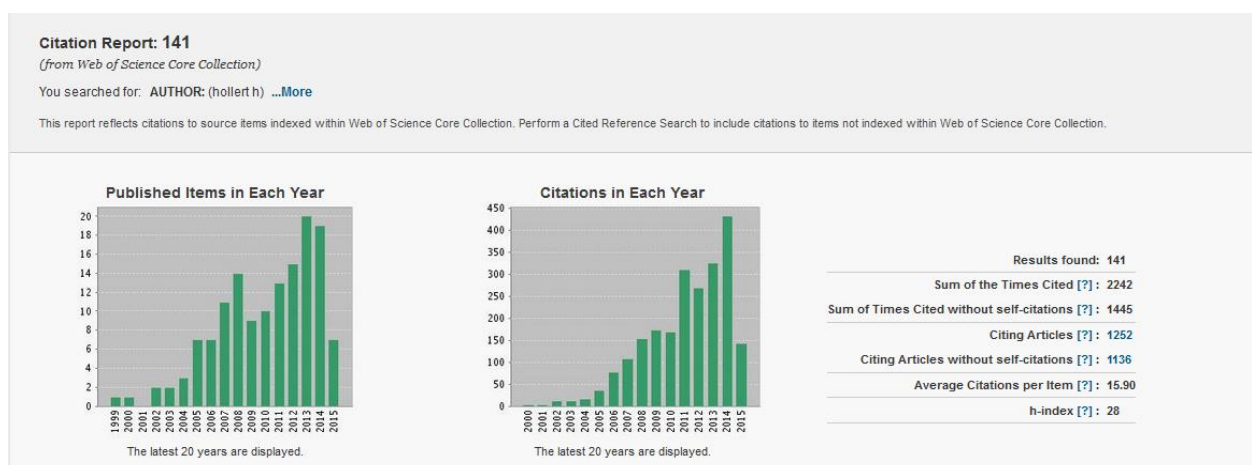
Henner Hollert has more than 15 years experience in management of national and international scientific projects (supported by Excellence Initiative of the German Government, DFG, US EPA, FZK, EU FP7 ITN, EU-FP6 See ERA Net, BfG, BMBF-PTJ, BMBF-FZK, BMBF-DLR, DAAD, German Rectors Conference – HRK, RWTH Seed funds, ERS@RWTH Pathfinder; total external funding approx. 7,2 Mio €)

Current research topics

Expert in bioanalytical environmental toxicology, aquatic toxicology, development and validation of in vitro bioassays, sediment and soil toxicology, waste- and ground water investigations, bioassay-directed fractionation and statistical evaluation of complex data matrixes.

Has published more than 200 peer-reviewed international and national articles as well as book chapters in this area (143 listed in ISI-Web-of-Science, 82 ISI-listed papers in the last 5 years, H-Index of 28)

In a recent comparison of ISI-based citations in Laborjournal (2011) Prof. Hollert was ranked as the 3rd most cited Ecotoxicologist in the German-language region (Germany, Switzerland and Austria)



International Journal Publications (Peer reviewed)

- Müller A-K, Brinkmann M, Baumann L, Stoffel M, Segner H, Kidd K, Hollert H (2015): Morphological alterations in the liver of yellow perch (*Perca flavescens*) from a biological mercury hotspot. *Environmental Science and Pollution Research*, online first
- Hafner C, Gartiser S, Garcia-Käufer M, Schiwy S, Hercher C, Meyer W, Achten C, Larsson M, Engwall M, Keiter S, Hollert H (2015): Investigations on sediment toxicity of German rivers applying a standardized bioassay battery. *Environmental Science and Pollution Research*, online first
- Sonnack L, Kampe S, Muth-Kohne E, Erdinger L, Henny N, Hollert H, Schafers C, Fenske M (2015): Effects of metal exposure on motor neuron development, neuromasts and the escape response of zebrafish embryos. *Neurotoxicol Teratol*, online first
- Simon A, Preuss TG, Schaffer A, Hollert H, Maes HM (2015): Population level effects of multiwalled carbon nanotubes in *Daphnia magna* exposed to pulses of triclocarban. *Ecotoxicology*, online first
- Braunig J, Schiwy S, Broedel O, Muller Y, Frohme M, Hollert H, Keiter SH (2015): Time-dependent expression and activity of cytochrome P450 1s in early life-stages of the zebrafish (*Danio rerio*). *Environ Sci Pollut Res Int*, online first
- Altenburger R, Ait-Aissa S, Antczak P, Backhaus T, Barcelo D, Seiler TB, Brion F, Busch W, Chipman K, de Alda ML, Umbuzeiro GDA, Escher BI, Falciani F, Faust M, Focks A, Hilscherova K, Hollender J, Hollert H, Jager F, Jahnke A, Kortenkamp A, Krauss M, Lemkine GF, Munthe J, Neumann S, Schymanski EL, Scrimshaw M, Segner H, Slobodnik J, Smedes F, Kughathas S, Teodorovic I, Tindall AJ, Tollefsen KE, Walz KH, Williams TD, Van den Brink PJ, van Gils J, Vrana B, Zhang XW, Brack W (2015): Future water quality monitoring - Adapting tools to deal with mixtures of pollutants in water resource management. *Science of the Total Environment* 512, 540-551
- Brack W, Altenburger R, Schuurmann G, Krauss M, Herraes DL, van Gils J, Slobodnik J, Munthe J, Gawlik BM, van Wezel A, Schriks M, Hollender J, Tollefsen KE, Mekenyan O, Dimitrov S, Bunke D, Cousins I, Posthuma L, van den Brink PJ, de Alda ML, Barcelo D, Faust M, Kortenkamp A, Scrimshaw M, Ignatova S, Engelen G, Massmann G, Lemkine G, Teodorovic I, Walz KH, Dulio V, Jonker MTO, Jager F, Chipman K, Falciani F, Liska I, Rooke D, Zhang XW, Hollert H, Vrana B, Hilscherova K, Kramer K, Neumann S, Hammerbacher R, Backhaus T, Mack J, Segner H, Escher B, Umbuzeiro GD (2015): The SOLUTIONS project: Challenges and responses for present and future emerging pollutants in land and water resources management. *Science of the Total Environment* 503, 22-31
- Doering JA, Beitel SC, Eisner BK, Heide T, Hollert H, Giesy JP, Hecker M, Wiseman SB (2015): Identification and response to metals of metallothionein in two ancient fishes: White sturgeon (*Acipenser transmontanus*) and lake sturgeon (*Acipenser fulvescens*). *Comparative Biochemistry and Physiology C-Toxicology & Pharmacology* 171, 41-48
- Gerbersdorf SU, Cimadoribus C, Class H, Engesser K-H, Helbich S, Hollert H, Lange C, Kranert M, Metzger J, Nowak W, Seiler T-B, Steger K, Steinmetz H, Wieprecht S (2015): Anthropogenic Trace Compounds (ATCs) in aquatic habitats — Research needs on sources, fate, detection and toxicity to ensure timely elimination strategies and risk management. *Environment International* 79, 85-105
- Hug C, Krauss M, Nusser L, Hollert H, Brack W (2015): Metabolic transformation as a diagnostic tool for the selection of candidate promutagens in effect-directed analysis. *Environmental Pollution* 196, 114-124
- Seiler TB, Klaschka U, Hollert H (2015): THREE PROPOSITIONS FOR IMPROVED SCIENCE COMMUNICATION FROM ENVIRONMENTAL RESEARCH. *Integrated Environmental Assessment and Management* 11, 174-175

- Zhu LY, Santiago-Schubel B, Xiao HX, Thiele B, Zhu ZL, Qiu YL, Hollert H, Koppers S (2015): An efficient laboratory workflow for environmental risk assessment of organic chemicals. *Chemosphere* 131, 34-40
- Schiwy S, Bräunig J, Alert H, Hollert H, Keiter SH (2014): A novel contact assay for testing aryl hydrocarbon receptor (AhR)-mediated toxicity of chemicals and whole sediments in zebrafish (*Danio rerio*) embryos. *Environmental Science and Pollution Research*, 1-14
- Bluhm K, Otte JC, Yang LX, Zinsmeister C, Legradi J, Keiter S, Kosmehl T, Braunbeck T, Strahle U, Hollert H (2014): Impacts of Different Exposure Scenarios on Transcript Abundances in *Danio rerio* Embryos when Investigating the Toxicological Burden of Riverine Sediments. *Plos One* 9
- Brinkmann M, Blenkle H, Salowsky H, Bluhm K, Schiwy S, Tiehm A, Hollert H (2014a): Genotoxicity of Heterocyclic PAHs in the Micronucleus Assay with the Fish Liver Cell Line RTL-W1. *Plos One* 9
- Brinkmann M, Eichbaum K, Buchinger S, Reifferscheid G, Bui T, Schaffer A, Hollert H, Preuss TG (2014b): Understanding Receptor-Mediated Effects in Rainbow Trout: In Vitro-in Vivo Extrapolation Using Physiologically Based Toxicokinetic Models. *Environmental Science & Technology* 48, 3303-3309
- Brinkmann M, Eichbaum K, Kammann U, Hudjetz S, Cofalla C, Buchinger S, Reifferscheid G, Schuttrumpf H, Preuss T, Hollert H (2014c): Physiologically-based toxicokinetic models help identifying the key factors affecting contaminant uptake during flood events. *Aquatic Toxicology* 152, 38-46
- Brinkmann M, Maletz S, Krauss M, Bluhm K, Schiwy S, Kuckelkorn J, Tiehm A, Brack W, Hollert H (2014d): Heterocyclic Aromatic Hydrocarbons Show Estrogenic Activity upon Metabolization in a Recombinant Transactivation Assay. *Environmental Science & Technology* 48, 5892-5901
- Cofalla C, Lorke S, Schuttrumpf H, Hudjetz S, Schaffrath H, Hollert H (2014): Hydrotoxicology - A Methodology to assess Contaminated Sediments in Reservoirs. *Wasserwirtschaft* 104, 34-37
- Eichbaum K, Brinkmann M, Buchinger S, Reifferscheid G, Hecker M, Giesy JP, Engwall M, van Bavel B, Hollert H (2014): In vitro bioassays for detecting dioxin-like activity - Application potentials and limits of detection, a review. *Science of the Total Environment* 487, 37-48
- Emelogu ES, Seiler TB, Pollard P, Robinson CD, Webster L, McKenzie C, Heger S, Hollert H, Bresnan E, Best J, Moffat CF (2014): Evaluations of combined zebrafish (*Danio rerio*) embryo and marine phytoplankton (*Diacronema lutheri*) toxicity of dissolved organic contaminants in the Ythan catchment, Scotland, UK. *Environmental Science and Pollution Research* 21, 5537-5546
- Hudjetz S, Herrmann H, Cofalla C, Brinkmann M, Kammann U, Schaffer A, Schuttrumpf H, Hollert H (2014): An attempt to assess the relevance of flood events-biomarker response of rainbow trout exposed to resuspended natural sediments in an annular flume. *Environmental Science and Pollution Research* 21, 13744-13757
- Jin XW, Wang YY, Jin W, Rao KF, Giesy JP, Hollert H, Richardson KL, Wang ZJ (2014): Ecological Risk of Nonylphenol in China Surface Waters Based on Reproductive Fitness. *Environmental Science & Technology* 48, 1256-1262
- Kammann U, Brinkmann M, Freese M, Pohlmann JD, Stoffels S, Hollert H, Hanel R (2014): PAH metabolites, GST and EROD in European eel (*Anguilla anguilla*) as possible indicators for eel habitat quality in German rivers. *Environmental Science and Pollution Research* 21, 2519-2530
- Kober R, Hollert H, Hornbruch G, Jekel M, Kamptner A, Klaas N, Maes H, Mangold KM, Martac E, Matheis A, Paar H, Schaffer A, Schell H, Schiwy A, Schmidt KR, Strutz TJ, Thummler S, Tiehm A, Braun J (2014): Nanoscale zero-valent iron flakes for groundwater treatment. *Environmental Earth Sciences* 72, 3339-3352

- Liu L, Chen L, Shao Y, Zhang LL, Floehr T, Xiao HX, Yan Y, Eichbaum K, Hollert H, Wu LL (2014): Evaluation of the Ecotoxicity of Sediments from Yangtze River Estuary and Contribution of Priority PAHs to Ah Receptor-Mediated Activities. *Plos One* 9
- Meyer W, Seiler TB, Christ A, Redelstein R, Puttmann W, Hollert H, Achten C (2014a): Mutagenicity, dioxin-like activity and bioaccumulation of alkylated picene and chrysene derivatives in a German lignite. *Science of the Total Environment* 497, 634-641
- Meyer W, Seiler TB, Schwarzbauer J, Puttmann W, Hollert H, Achten C (2014b): Polar polycyclic aromatic compounds from different coal types show varying mutagenic potential, EROD induction and bioavailability depending on coal rank. *Science of the Total Environment* 494, 320-328
- Nickel C, Angelstorf J, Bienert R, Burkart C, Gabsch S, Giebner S, Haase A, Hellack B, Hollert H, Hund-Rinke K, Jungmann D, Ka-minski H, Luch A, Maes HM, Nogowski A, Oetken M, Schaeffer A, Schiwy A, Schlich K, Stintz M, von der Kammer F, Kuhlbusch TAJ (2014): Dynamic light-scattering measurement comparability of nanomaterial suspensions. *Journal of Nanoparticle Research* 16
- Seiler TB, Best N, Fernqvist MM, Hercht H, Smith KEC, Braunbeck T, Mayer P, Hollert H (2014): PAH toxicity at aqueous solubility in the fish embryo test with *Danio rerio* using passive dosing. *Chemosphere* 112, 77-84
- Simon A, Maletz SX, Hollert H, Schaffer A, Maes HM (2014): Effects of multiwalled carbon nanotubes and triclocarban on several eukaryotic cell lines: elucidating cytotoxicity, endocrine disruption, and reactive oxygen species generation. *Nanoscale Research Letters* 9
- Westman O, Larsson M, Venizelos N, Hollert H, Engwall M (2014): An oxygenated metabolite of benzo a pyrene increases hepatic beta-oxidation of fatty acids in chick embryos. *Environmental Science and Pollution Research* 21, 6243-6251
- Maletz, S., T. Floehr, S. Beier, C. Klümper, A. Brouwer, P. Behnisch, E. Higley, J. P. Giesy, M. Hecker, W. Gebhardt, V. Linnemann, J. Pinnekamp, and H. Hollert. 2013. In vitro characterization of the effectiveness of enhanced sewage treatment processes to eliminate endocrine activity of hospital effluents. *Water Research* 47:1545-1557.
- Yu Pan , Annika Leifert , Michael Graf , Frank Schiefer , Sven Thoröe-Boveleth , Janine Broda , Mary C. Halloran , Henner Hollert , Dominic Laaf , Ulrich Simon , Jahnen-Dechent W (2013): High-Sensitivity Real-Time Analysis of Nanoparticle Toxicity in Green Fluorescent Protein-Expressing Zebrafish. *Small* DOI: 10.1002/smll.201201173
- T. Floehr* & H Xiao, B Scholz-Starke, Li Wu, Ji Hou, D Yin, X Zhang, R Ji, X Yuan, R Ottermanns, M Roß-Nickoll, A Schäffer, H Hollert (2013): Solution by dilution? - A review on the pollution status of the Yangtze River. *Environ Sci Poll Res.* <http://dx.doi.org/10.1007/s11356-013-1666-1>
- Brinkmann, M., S. Hudjetz, U. Kammann, M. Hennig, J. Kuckelkorn, M. Chinoraks, C. Cofalla, S. Wiseman, J. P. Giesy, A. Schäffer, M. Hecker, J. Wölz, H. Schüttrumpf, and H. Hollert. 2013. How flood events affect rainbow trout: Evidence of a biomarker cascade in rainbow trout after exposure to PAH contaminated sediment suspensions. *Aquatic Toxicology* 128-129:13-24.
- Eichbaum, K., M. Brinkmann, S. Buchinger, M. Hecker, M. Engwall, B. van Bavel, G. Reifferscheid, and H. Hollert. 2013. The dioRAMA project: assessment of dioxin-like activity in sediments and fish (*Rutilus rutilus*) in support of the ecotoxicological characterization of sediments. *Journal of Soils and Sediments*: 13: 770-774
- Emelogu, E. S., P. Pollard, C. D. Robinson, F. Smedes, L. Webster, I. W. Oliver, C. McKenzie, T. B. Seiler, H. Hollert, and C. F. Moffat. 2013. Investigating the significance of dissolved organic contaminants in aquatic environments: Coupling passive sampling with in vitro bioassays. *Chemosphere* 90:210-219.
- Feiler, U., S. Höss, W. Ahlf, D. Gilberg, M. Hammers-Wirtz, H. Hollert, M. Meller, H. Neumann-Hensel, R. Ottermanns, T. B. Seiler, D. Spira, and P. Heininger. 2013. Sediment

- contact tests as a tool for the assessment of sediment quality in German waters. *Environmental Toxicology and Chemistry* 32:144-155.
- Ion, A. C., S. Bley, I. Ion, A. Culetu, S. Zahov, H. Hollert, and T. B. Seiler. 2013. Investigation of the contaminant sorption of treated Romanian soils using "batch" and biological toxicity assays. *Catena* 101:205-211.
- Karami, A., S. Keiter, H. Hollert, and S. C. Cour-tenay. 2013. Fuzzy logic and adaptive neuro-fuzzy inference system for characterization of contaminant exposure through selected bi-omarkers in African catfish. *Environmental Science and Pollution Research* 20:1586-1595.
- Park, S. J., H. Baars, S. Mersmann, H. Busch-mann, J. M. Baron, P. M. Amann, K. Czaja, H. Hollert, K. Bluhm, R. Redelstein, and C. Bolm. 2013. N-Cyano Sulfoximines: COX Inhibition, Anticancer Activity, Cellular Toxicity, and Mu-tagenicity. *ChemMedChem* 8:217-220.
- Scholz-Starke, B., R. Ottermanns, U. Rings, T. Floehr, H. Hollert, J. Hou, B. Li, L. L. Wu, X. Yuan, K. Strauch, H. Wei, S. Norra, A. Hol-bach, B. Westrich, A. Schäffer, and M. Roß-Nickoll. 2013. An integrated approach to model the biomagnification of organic pollutants in aquatic food webs of the Yangtze Three Gorges Reservoir ecosystem using adapted pollution scenarios. *Environmental Science and Pollution Research*:1-18.
- Vardy, D. W., J. Oellers, J. A. Doering, H. Hollert, J. P. Giesy, and M. Hecker. 2013. Sensitivity of early life stages of white sturgeon, rainbow trout, and fathead minnow to copper. *Ecotoxicology* 22:139-147.
- Westman, O., M. Nordén, M. Larsson, J. Johansson, N. Venizelos, H. Hollert, and M. Engwall. 2013. Polycyclic aromatic hydrocarbons (PAHs) reduce hepatic β -oxidation of fatty acids in chick embryos. *Environmental Science and Pollution Research* 20:1881-1888.
- Bluhm K, Heger S, Seiler T-B, Hallare AV, Schäffer A & Hollert H (2012) Toxicological and ecotoxicological potencies of biofuels used for the transport sector – a literature review. *Energy & Environmental Science*, DOI: 10.1039/c2ee03033k (**Impact factor 9,4**)
- Heger S, Bluhm K, Agler MT, Maletz S, Schaffer A, Seiler T-B, Angenent LT, Hollert H (2012): Biotests for hazard assessment of biofuel fermentation. *Energy & Environmental Science*. <http://dx.doi.org/10.1039/C2EE21623J> (**Impact Factor 9,4**)
- Pan YU, Leifert A, Graf M., Söllner C., Halloran MC, Hollert H, Laaf D, Simon U, Jahnen-Dechent W (2012). High Sensitivity Real-time Analysis of Nanoparticles Toxicity in Green Fluorescent Protein Expressing Zebrafish, Small, in press (**Impact factor 7,3**)
- Bergmann A, Bi Y, Chen L, Floehr T, Henkelmann B, Holbach A, Hollert H, Hu W, Kranzioch I, Klumpp E, Küppers S, Norra S, Ottermanns R, Pfister G, Roß-Nickoll M, Schäffer A, Schleicher N, Schmidt B, Scholz-Starke B, Schramm KW, Subklew G, Tiehm A, Temoka C, Wang J, Westrich B, Wilken RD, Wolf A, Xiang X, Yuan Y (2012): The Yangtze-Hydro Project: a Chinese-German environmental program. *Environmental Science and Pollution Research* 2011:1-4. online first
- Kosmehl T, Otte JC, Yang L, Legradi J, Bluhm K, Zinsmeister C, Keiter SH, Reifferscheid G, Manz W, Braunbeck T, Strähle U, Hollert H (2012) A combined DNA-microarray and mechanism-specific toxicity approach with zebrafish embryos to investigate the pollution of river sediments. *Reproductive Toxicology* 33, 245-253
- Sabrina Peddinghaus, Markus Brinkmann, Kerstin Bluhm, Anne Sagner, Gunnar Hinger, Thomas Braunbeck, Adolf Eisenträger, Andreas Tiehm, Henner Hollert* & Steffen H. Keiter (2012): Quantitative assessment of the embryotoxic potential of NSO-heterocyclic compounds using zebrafish (*Danio rerio*). *Reproductive Toxicology* 33, 224-232
- Ion AC, Bley S, Ion I, Culetu A, Zahov S, Hollert H, Seiler T-B Investigation of the contaminant sorption of treated Romanian soils using "batch" and biological toxicity assays. *CATENA*, in press
- Schulze T, Seiler TB, Streck G, Braunbeck T, Hollert H (2012): Comparison of different exhaustive and biomimetic extraction techniques for chemical and biological analysis of polycyclic aromatic compounds in river sediments. *Journal of Soils and Sediments*, 1-16

- Perovic A, Perovic S, Erdinger L, Hollert H (2012): Assessment of the genotoxic potential of lake skadar sediments using ames test and comet assay on the fish cell line RTL-W1. *Archives of Biological Sciences* 64, 249-256
- Cofalla C, Hudjetz S, Roger S, Brinkmann M, Frings R, Wölz J, Schmidt B, Schäffer A, Kammann U, Hecker M, Hollert H, Schüttrumpf H (2012): A combined hydraulic and toxicological approach to assess re-suspended sediments during simulated flood events—part II: an interdisciplinary experimental methodology. *Journal of Soils and Sediments* 12, 429-442
- Hawliczek A, Nota B, Cenijn P, Kamstra J, Pieterse B, Winter R, Winkens K, Hollert H, Segner H, Legler J (2012): Developmental toxicity and endocrine disrupting potency of 4-azapyrene, benzo[b]fluorene and retene in the zebrafish *Danio rerio*. *Reproductive Toxicology* 33, 213-223
- Emelogu ES, Pollard P, Robinson CD, Smedes F, Webster L, Oliver IW, McKenzie C, Seiler TB, Hollert H, Moffat CF (2012): Investigating the significance of dissolved organic contaminants in aquatic environments: Coupling passive sampling with in vitro bioassays. *Chemosphere*
- Kaiser D, Sieratowicz A, Zielke H, Oetken M, Hollert H, Oehlmann J (2012): Ecotoxicological effect characterisation of widely used organic UV filters. *Environmental Pollution* 163, 84-90
- Reifferscheid G, Maes HM, Allner B, Badurova J, Belkin S, Bluhm K, Brauer F, Bressling J, Domeneghetti S, Elad T, Flückiger-Isler S, Grummt HJ, Gürtler R, Hecht A, Heringa MB, Hollert H, Huber S, Kramer M, Magdeburg A, Ratte HT, Sauerborn-Klobucar R, Sokolowski A, Soldan P, Smital T, Stalter D, Venier P, Ziemann C, Zipperle J, Buchinger S (2012): International round-robin study on the Ames fluctuation test. *Environmental and Molecular Mutagenesis* 53, 185-197
- Strähle U, Scholz S, Geisler R, Greiner P, Hollert H, Rastegar S, Schumacher A, Selderslaghs I, Weiss C, Witters H, Braunbeck T (2012): Zebrafish embryos as an alternative to animal experiments - A commentary on the definition of the onset of protected life stages in animal welfare regulations, *Reproductive Toxicology*, online first doi:10.1016/j.reprotox.2011.06.121
- Wetterauer B., Ricking M, Otte, JC, Hallare A., Rastall A, Erdinger L, Schwarzbauer J, Braunbeck T, Hollert, H* (2012): Toxicity and endocrine effects of DDT and its metabolites DDA, DDMU, DDMS and DDCN. *Environ Science Poll Res*, 19:403–415 DOI: 10.1007/s11356-011-0570-9
- Heimann W, Sylvester M, Seiler TB, Hollert H, Schulz R: Sediment toxicity in a connected oxbow lake of the Upper Rhine (Germany): EROD induction in fish cells. *Journal of Soils and Sediments* 2011, 11:1279-1291.
- Wölz J, Grosshans K, Streck G, Schulze T, Rastall A, Erdinger L, Brack W, Fleig M, Kühlers D, Braunbeck T, Hollert H (2011): Estrogen receptor mediated activity in bankside groundwater, with flood suspended particulate matter and floodplain soil - An approach combining tracer substance, bioassay and target analysis. *Chemosphere* 85, 717-723
- Rocha PS, Bernecker C, Strecker R, Mariani CF, Pompão MLM, Storch V, Hollert H, Braunbeck T (2011): Sediment-contact fish embryo toxicity assay with *Danio rerio* to assess particle-bound pollutants in the Tietê River Basin (São Paulo, Brazil). *Ecotoxicology and Environmental Safety* 74, 1951-1959
- Gerbersdorf SU, Hollert H, Brinkmann M, Wieprecht S, Schüttrumpf H, Manz W (2011): Anthropogenic pollutants affect ecosystem services of freshwater sediments: the need for a "triad plus x" approach. *Journal of Soils and Sediments*, online first: DOI: 10.1007/s11368-011-0373-0
- Hinger G, Brinkmann M, Bluhm K, Sagner A, Takner H, Eisenträger A, Braunbeck T, Engwall M, Tiehm A, Hollert H (2011): Some heterocyclic aromatic compounds are Ah receptor agonists in the DR-CALUX assay and the EROD assay with RTL-W1 cells. *Environmental Science and Pollution Research* 18, 1297-1304

- Hecker, M. and Hollert H. (2011): Endocrine disruptor screening: regulatory perspectives and needs. *Environmental Sciences Europe*, 23:15. (doi:10.1186/2190-4715-23-15)
- Cormio PG, Christmann M, Rastall A, Grund S, Hollert H, Schuphan I, Schmidt B (2011): Chlorinated isomers of nonylphenol differ in estrogenic and androgenic activity. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering* 46, 329-336
- Grund S, Higley E, Schönenberger R, Suter MJ, Giesy JP, Braunbeck T, Hecker M, Hollert H (2011): The endocrine disrupting potential of sediments from the Upper Danube River (Germany) as revealed by in vitro bioassays and chemical analysis. *Environmental Science and Pollution Research* 18, 446-460
- Hallare AV, Seiler TB, Hollert H (2011): The versatile, changing, and advancing roles of fish in sediment toxicity assessment—a review. *Journal of Soils and Sediments* 11, 141-173
- Hecker M, Hollert H, Cooper R, Vinggaard AM, Akahori Y, Murphy M, Nellemann C, Higley E, Newsted J, Laskey J, Buckalew A, Grund S, Maletz S, Giesy J, Timm G (2011): The OECD validation program of the H295R steroidogenesis assay: Phase 3. Final inter-laboratory validation study. *Environmental Science and Pollution Research* 18, 503-515
- Oleszczuk P, Hollert H (2011): Comparison of sewage sludge toxicity to plants and invertebrates in three different soils. *Chemosphere* 83, 502-509
- Strecker R, Seiler TB, Hollert H, Braunbeck T (2011): Oxygen requirements of zebrafish (*Danio rerio*) embryos in embryo toxicity tests with environmental samples. *Comparative Biochemistry and Physiology - C Toxicology and Pharmacology* 153, 318-327
- Wölz J, Schulze T, Lübcke-von Varel U, Fleig M, Reifferscheid G, Brack W, Kühlers D, Braunbeck T, Hollert H (2011): Investigation on soil contamination at recently inundated and non-inundated sites. *Journal of Soils and Sediments* 11, 82-92
- Zielke H, Seiler TB, Niebergall S, Leist E, Brinkmann M, Spira D, Streck G, Brack W, Feiler U, Braunbeck T, Hollert H (2011): The impact of extraction methodologies on the toxicity of sediments in the zebrafish (*Danio rerio*) embryo test. *Journal of Soils and Sediments* 11, 352-363
- Otte JC, Schmidt AD, Hollert H, Braunbeck T (2010): Spatio-temporal development of CYP1 activity in early life-stages of zebrafish (*Danio rerio*). *Aquatic Toxicology* 100, 38-50
- Grund S*, Keiter S, Böttcher M, Seitz N, Wurm K, Manz W, Hollert H, Braunbeck H (2010): Assessment of fish health status in the Upper Danube River by investigation of ultrastructural alterations in the liver of barbel (*Barbus barbus*, L.). *Journal Diseases of Aquatic Organisms*. 88: 235–248.
- Lundström E*, Brinkmann M, Ek K, Hollert H, Persson J-O, Breitholtz M (2010): Comparison of six different treatment technologies – population level responses in the harpacticoid copepod *Nitocra spinipes*. *Aquatic toxicology*, 96: 298–307.
- Keiter S, Peddinghaus S, Feiler U, von der Goltz B, Hafner C, Ho NY, Rastegar S, Otte JC, Ottermanns R, Reifferscheid G, Strähle U, Braunbeck T, Hammers-Wirtz M, Hollert H* (2010): DanTox — a novel joint research project using zebrafish (*Danio rerio*) to identify specific toxicity and molecular modes of action of sediment-bound pollutants. *J Soils Sed*, 714-717
- Wölz J, Brack W, Möhlenkamp C, Claus E, Braunbeck T, Hollert H. (2010): Identification of dioxin-like activity in suspended particulate matter of floods using effect directed analysis. *Sci Tot Environ*. 408 (2010) 3327–3333
- Böttcher M, Grund S, Keiter S, Kosmehl T, Reifferscheid G, Seitz N, Hollert H, Braunbeck T (2010): Linking between Genotoxicity in vitro and in situ on the basis of the Micronucleus Assay. *Mut Res*, 700 (2010) 11–17
- Rocha P*, Azab E, Schmidt B, Storch V, Hollert H, Braunbeck T (2010): Changes in toxicity and Ah receptor agonist activity of sediments from the Tietê River (São Paulo, Brazil) - a mass balance approach using in vitro methods and chemical analysis. *Ecotox Environ Safety*. 73: 550-558

- Brinkmann M, Hudjetz S, Cofalla C, Roger S, Kammann U, Giesy JP, Hecker M, Wiseman S, Zhang X, Wölz J, Schüttrumpf H, Hollert H (2010): A combined hydraulic and toxicological approach to assess re-suspended sediments during simulated flood events. Part I-multiple biomarkers in rainbow trout. *Journal of Soils and Sediments* 10, 1347-136
- Höss S, Ahlf W, Fahnenstich C, Gilberg D, Hollert H, Melbye K, Meller M, Hammers-Wirtz M, Heininger P, Neumann-Hensel H, Ottermanns R, Ratte HT, Seiler TB, Spira D, Weber J, Feiler U (2010): Variability of sediment-contact tests in freshwater sediments with low-level anthropogenic contamination-Determination of toxicity thresholds. *Environmental Pollution* 158, 2999-3010
- Wölz J, Brack W, Moehlenkamp C, Claus E, Braunbeck T, Hollert H (2010): Effect-directed analysis of Ah receptor-mediated activities caused by PAHs in suspended particulate matter sampled in flood events. *Science of the Total Environment* 408, 3327-3333
- Wölz J, Fleig M, Schulze T, Maletz S, Lübcke-von Varel U, Reifferscheid G, Kühlers D, Braunbeck T, Brack W, Hollert H (2010): Impact of contaminants bound to suspended particulate matter in the context of flood events. *Journal of Soils and Sediments* 10, 1174-1185
- Rocha PS*, Kosmehl T, Luvizotto GL, Böttcher M, Braunbeck T., Storch V, Hollert H (2009): Sediment genotoxicity in the Tiete River (Sao Paulo, Brazil): In vitro comet assay versus in situ micronucleus assay studies. *Ecotox Environ Safety* 72 : 1842–1848
- Hallare AV, Factor PA, Santos EK, Hollert H (2009): Assessing the impact of fish cage culture on Taal Lake (Philippines) water and sediment quality using the zebrafish embryo assay. *The Philippine journal of science* 138, 91-104
- Keiter S, Heise S, Pudenz S, Braunbeck T., Manz W, Hollert H (2008): Development of a classification system for the evaluation of sediment toxicity using mechanism-specific bioassays, *Journal of Soils and Sediments*, 9, 168-179
- Wölz J, Cofalla C, Hudjetz S, Roger S, Brinkmann M, Schmidt B, Schaffer A, Kammann U, Lennartz G, Hecker M, Schüttrumpf H, Hollert H (2009): In search for the ecological and toxicological relevance of sediment re-mobilisation and transport during flood events. *Journal of Soils and Sediments* 9, 1-5
- Wölz J, Borck D, Witt G, Hollert H (2009): Ecotoxicological characterization of sediment cores from the western Baltic Sea (Mecklenburg Bight) using GC-MS and in vitro biotests. *Journal of Soils and Sediments*, 9, 400–410
- Schaeffer A, Hollert H, Ratte HT, Roß-Nickoll M, Filser J, Matthies M, Oehlmann J, Scheringer M, Schulz R, Seitz A (2009): An indispensable asset at risk: merits and needs of chemicals-related environmental sciences. *Environmental Science and Pollution Research*, 16, 410–413
- Kuehlers D, Bethge E, Hillebrand G, Hollert H, Fleig M, Lehmann B, Maier D, Maier M, Mohrlök U, Wölz J (2009): Contaminant transport to public water supply wells via flood water retention areas. *Nat. Hazards Earth Syst. Sci.* 9, 1047-1058
- Andersson E, Rotander A, von Kronhelm T, Berggren A, Ivarsson P, Hollert H, Engwall M (2009): AhR agonist and genotoxicant bioavailability in a PAH-contaminated soil undergoing biological treatment. *Environ Sci Pollut Res* 16:521–530 (ISI: 3,894)
- Hecker M & Hollert H (2009): Effect-directed analysis (EDA) in aquatic ecotoxicology: state of the art and future challenges. *Environ Sci Pollut Res* (2009) 16:607–613 (ISI: 3,894)
- J Wölz, M Engwall, S Maletz, H Olsmann, B van Bavel, U Kammann, M Klempt, T Braunbeck & H Hollert (2008): Changes in toxicity and Ah receptor agonist activity of suspended particulate matter during flood events at the rivers Neckar and Rhine — a mass balance approach using in vitro methods and chemical analysis *Environ Sci Poll Res* 15:536–553 (ISI: 3,894)
- Weber R, Gaus C, Tysklind M, Johnston P, Forter M, Hollert H, Heinisch E, Holoubek I, Lloyd Smith M, Masunaga S, Moccarelli P, Santillo D, Seike N, Symons R, Paulo Machado Torres J, Verta M, Varbelow G, Vijgen J, Watson A, Costner P, Woelz J, Wycisk P, Zennegg M (2008): Dioxin and POP-contaminated sitescontemporary and future relevance

- and challenges – Overview on background, aims and scope of the series. *Env Sci Pollut Res.* 15:363–393 (ISI: 3,894)
- Eisentraeger*, A, C. Brinkmann, H. Hollert, A. Sagner, A. Tiehm, J. Neuwoehner (2008): Heterocyclic compounds: Toxic effects using algae, daphnids and the Salmonella/microsome test taking methodical quantitative aspects into account. *Environ. Tox. Chem.* Vol. 27, No. 7, pp. 1590–1596 (ISI: 2,309).
- Otte JC, Abrahamson A, Andersson C, Engwall M, Keiter S, Olsman H, Hollert H, Brunström (2008): Induction of ethoxyresorufin-O-deethylase (EROD) in the three-spined stickleback (*Gasterosteus aculeatus* L.) exposed to extracts of sediments from the Danube River. *Environ International*, 34 : 1176–1184 (ISI: 2.797).
- Seiler, TB, Schulze, T, Hollert H (2008): The risk of altering soil and sediment samples upon extract preparation for analytical and bioanalytical investigations - a review. *Analytical Bioanalytical Chemistry.* 390 : 1975–1985 (ISI: 2,8)
- Keiter S, Grund S, Böttcher M, van Bavel B, Engwall M, Kamman U, Klempt M, Manz W, Olsman H, Seitz N, Wurm K, Braunbeck T & Hollert H* (2008): Activities and identification of aryl hydrocarbon receptor agonists in sediments from the Danube river. *Analytical Bioanalytical Chemistry* 390 : 2009–2019 (ISI: 2,8)
- Seitz N, Keiter S, Böttcher M, Kosmehl T, Manz W, Hollert H, Braunbeck T (2008): Evaluation of the genotoxic potential of sediment samples from the Danube River using an expert system and several analysing methods. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, 652 : 38–45. (ISI: 2,278)
- Kosmehl T, Hallare AV, Braunbeck T & Hollert, H (2008): DNA damage induced by genotoxicants in zebrafish (*Danio rerio*) embryos after contact exposure to freeze-dried sediment and sediment extracts from Laguna Lake (The Philippines) as measured by the comet assay, *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, 650 : 1–14 (ISI: 2,278)
- G. Reifferscheid*, C. Ziemann, D. Fieblinger, F. Dill, R. Gminski, H.-J. Grummt, C. Hafner, H. Hollert, S. Kunz, G. Rodrigo, H. Stopper, D. Selke (2008): Measurement of genotoxicity in wastewater samples with the in vitro micronucleus test – Results of a collaborative study in the context of standardisation according to ISO. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, 649 : 15–27 (ISI: 2,278)
- Kosmehl T, Krebs F, Manz W, Braunbeck T, Hollert H (2007): Differentiation Between bioavailable and Total Hazard Potential of Sediment Induced DNA Fragmentation as Measured by the Comet Assay with Zebrafish Embryos. *J Soils Sediments* 7 (6) 377–387 (ISI: 4,373)
- Olsman H, Otte J, Kamman, U., van Bavel B, Engwall, M, Hollert H, (2007): Toxicity equivalency factors of brominated and mixed brominated/chlorinated dibenzodioxins in DR-CALUX and RTL-W1 cell lines. *Environ. Toxi-col. Chem.* Vol. 26, No. 11, pp. 2448–2454, (ISI: 2,309)
- Stesevic D, Feiler U, Puric M, Sundic D, Erdinger L, Sokoli L, Heining P, Hollert H* (2007) Application of a new sediment contact test with *Myriophyllum aquaticum* and of the aquatic duckweed test to assess the sediment quality of Lake Skadar/Shkodra within the EULIMNOS framework. *JSS - Journal of Soils and Sediments*, 7 (5) 342 – 349 (ISI 4,373)
- Gustavsson, L, Hollert, H, Jönsson, S, van Bavel, B, Engwall, M (2007): Reed Beds Receiving Industrial Sludge Containing Nitroaromatic Compounds. Effects of outgoing water and bed material extracts in the umu-C genotoxicity assay, DR-CALUX assay and on early life stage development in Zebrafish (*Danio rerio*). *Env Sci Pollut Res* 14 (3) 202–211 (ISI: 3,894)
- M. Hecker*, H. Hollert, R. Cooper, A.-M. Vinggaard, Y. Akahori, M. Murphy, C. Nellesmann, E. Higley, J. Newsted, R. Wu, P. Lam, J. Laskey, A. Buckalew, S. Grund, M. Nakai, G. Timm, J. Giesy (2007): The OECD Validation Program of the H295R Steroidogenesis Assay for the Identification of In Vitro Inhibitors and Inducers of Testosterone and Estradiol

- Production. Phase 2: Inter-Laboratory Pre-Validation Studies. *ESPR - Environ Science Poll Res. Special Issue 1*, 23–30 (ISI: 3,894)
- Jernbro S, Rocha PS, Keiter, S, Skutlarek D, Färber H, Jones P, Giesy J, Hollert H*, Engwall M (2007): Perfluorooctane sulfonate is increasing the genotoxicity of cyclophosphamide in the micronucleus assay with V79 cells – further proof of alterations in cell membrane properties caused by PFOS. - *ESPR - Environ Science Poll Res*, 14 (2) 85 – 87 (ISI: 3,894)
- Keiter S, A. Rastall,, Kosmehl T, Wurm K, Erdinger, Braunbeck T, Hollert H* (2006): Ecotoxicological Assessment of Sediment, Suspended Matter and Water Samples in the Upper Danube River. A pilot study in search for the causes for the decline of fish catches, *ESPR - Environ Science Poll Res*, 13 : 308-319 (ISI: 3,894)
- Kosmehl T, Reifferscheid G, Manz W, Braunbeck T, Hollert H* (2006): A novel contact assay to assess genotoxic burden of sediments using the comet assay with zebrafish larvae. *Environmental Toxicology and Chemistry*, 25: 2097-2106 (ISI: 2,309)
- Seiler TB, Rastall AC, Leist, E, Erdinger L, Braunbeck, T, Hollert, H* (2006) Membrane Dialysis Extraction (MDE): A Novel Approach for Extracting Toxicologically Relevant Hydrophobic Organic Compounds from Soils and Sediments for Assessment in Biotests. *JSS - Journal of Soils and Sediments*, 6 : 20 – 29 (ISI: 4,373)
- Chapman, PM & Hollert, H (2006) Should the sediment quality triad become a tetrad, a pentad, or possibly even a hexad? *JSS - Journal of Soils and Sediments*, 6 : 4 – 8 (ISI: 4,373)
- Hollert H*, Dürr M, Holtey-Weber R, Islinger M, Brack W, Färber H, Erdinger L, Braunbeck T (2005): Endocrine disruption of water and sediment extracts in a non-radioactive dot blot/RNase protection-assay using isolated hepatocytes of rainbow trout - How explain deficiencies between bioanalytical effectiveness and chemically determined concentrations? *ESPR - Environ Science Poll Res*, 12, 347-360, (ISI: 3,894)
- Kostanjšek R, Lapanje A, Drobne D, Nikčević S, Perović A, Zidar P, Štrus J, Hollert H, Karaman G (2005): Bacterial community structure analyses to assess pollution of water and sediments in the Lake Shkodra/Skadar, Balkan Peninsula, *Environ Science Poll Res*, 12, 361 – 368, (ISI: 3,894)
- Brack W, Erdinger L, Schirmer K, Hollert H, (2005): Identification of Mutagenicity and EROD-Inducing Potency in Aquatic Sediments. *Environmental Toxicology and Chemistry*. Vol. 24, No. 10, pp. 2445–2458, (ISI: 2,309)
- Olsman H, Hollert H, Otte J, van Bavel B, Engwall, M (2005): Ah-receptor activity induced by brominated and mixed brominated/chlorinated dibenzodioxins in DR-CALUX and RTL-W1 cell lines. *Organ. Compounds*. 63:355 - 358
- Hallare AV, Kosmehl T, Schulze T, Hollert H, Koehler H-R, Triebkorn R (2005): Assessing The Severity of Sediment Contamination in Laguna Lake, Philippines Using A Sediment Contact Assay with Zebrafish (*Danio rerio*) Embryos. *Sci Total Environ*, 347: 254-71 (ISI: 2,182)
- Braunbeck T, Böttcher, M., Hollert, H., Kosmehl, T, Lammer, E., Leist E., Rudolf, M., Seitz, N. (2005): Towards an alternative for the acute fish LC₅₀ test in chemical assessment: The fish embryo toxicity test goes multi-species – an update. *ALTEX*. 22 (2): 87 102 (ISI: 1,286)
- Rakocevic–Nedovic J, Hollert H (2005): Phytoplankton Community and Its Pigment Characteristics as Trophic Indexes of the Skadar Lake (Montenegro, Balkan). *Environ Sci Pollut Res* (3) 146-152 (ISI: 3,894)
- Gustavsson L, Klee N, Olsmann H, Hollert H, Engwall M (2004): Fate of Ah Receptor Agonists during Biological Treatment of an Industrial Sludge Containing Explosives and Pharmaceutical Residues. *ESPR - Environ Science Poll Res* 11 (6) : 379–387, (ISI: 3,894)
- Klee N, Gustavsson L, Kosmehl T, Engwall M, Erdinger L, Braunbeck T, Hollert H* (2004): Toxicity and genotoxicity in an industrial sewage sludge containing nitro- and amino-aromatic compounds during treatment in bioreactors under different oxygen regimes. *ESPR - Environ Science Poll Res* 11 (5) 313 – 320, (ISI: 3,894)

- Kosmehl T, Krebs F, Manz W, Erdinger L, Braunbeck T, Hollert H* (2004): Comparative genotoxicity testing of Rhine river sediment extracts using the permanent cell lines RTG-2 and RTL-W1 in the comet assay and Ames assay. *JSS - Journal of Soils and Sediments*, 4, 84 – 94, (ISI: 4,373)
- Rastall A, Neziri A, Vukovic Z, Jung C, Mijovic S, Hollert H, Nikcevic S, Erdinger L (2004): The Identification of Readily Bioavailable Pollutants in Lake Shkodra/Skadar Using Semipermeable Membrane Devices (SPMDs), Bioassays and Chemical Analysis. *ESPR - Environ Science Poll Res*, 11, 240-53 (ISI: 3,894)
- Hollert, H*, S. Keiter, N. König, M. Rudolf, M. Ulrich, and T. Braunbeck. 2003. A New Sediment Contact Assay to Assess Particle-bound Pollutants Using Zebrafish (*Danio rerio*) Embryos. *JSS – J Soils & Sediments* 3: 197 – 207., (ISI: 4,373)
- Brack, W., T. Kind, H. Hollert, S. Schrader, and M. Moder. 2003. Sequential fractionation procedure for the identification of potentially cytochrome P4501A-inducing compounds. *J Chromatogr A* 986: 55-66. (ISI: 3,10)
- Hollert, H*, Dürr, M., Olsman, H., Halldin, K., van Bavel, B., Brack, W., Tysklind, M., Engwall, M. & Braunbeck, T., 2002: Biological and chemical determination of dioxin-like compounds in sediments by means of a sediment triad approach in the catchment area of the Neckar River. *Ecotoxicology*: 11: 323 – 336 (ISI: 2,405)
- Hollert, H*, Heise, S., Pudenz, S., Brüggemann, R., Ahlf, W. & Braunbeck, T., 2002: Application of a sediment quality triad and different statistical approaches (hasse diagrams and fuzzy logic) for the comparative evaluation of small streams. *Ecotoxicology*: 11: 311 – 321 (ISI: 2,405)
- Ahlf, W., Hollert, H., Neumann-Hensel, H. & Ricking, M., 2002: A Guidance for the Assessment and Evaluation of Sediment Quality: A German Approach Based on Ecotoxicological and Chemical Measurements. *JSS - Journal of Soils and Sediments*, 2: 37-42. (ISI: ca. 4,373)
- Braunbeck, T. & H. Hollert, 2002: Sediment toxicity - strategies for (eco-)toxicological evaluation. *Mar. Env. Res.*, 54(3-5) (ISI: 1,61)
- Hollert, H*, Dürr, M., Erdinger, L. & Braunbeck, T., 2000: Cytotoxicity of settling particulate matter (SPM) and sediments of the Neckar river (Germany) during a winter flood. *Environ. Tox. Chem.*, 19 (3): 528-534. (ISI: 2,309)
- Islinger, M., Pawlowski, S., Hollert, H., Völkl, A. & Braunbeck, T., 1999: Measurement of vitellogenin-mRNA expression in primary cultures of rainbow trout hepatocytes in a non-radioactive dot blot/RNase protection-assay. *Sci Total Environ*, 15: 109-122.