

Publikationsliste 2024

Prof. Dr. Stephan Pflugmacher Lima

Publikationsliste Stand Juli 2024

(Journal IP aus dem Jahr der Publikation)

2024

Esterhuizen, M., Monticelli, M., Lee, S.-A., Kim, Y., Pflugmacher, S., Kim, Y.J. (2024): Oxidative stress status and antioxidative responses in neonate versus adult *Daphnia magna* exposed to polystyrene leachate. *Toxicology and Environmental Health*, DOI: 10.1007/s13530-024-00211-1.

IP 2.649

2023

Esterhuizen, M., **Pflugmacher, S.** (2023): Phytoremediation of diclofenac using the Green Liver System: Macrophyte screening to system optimization. *New Biotechnology*, 76, 82-89, DOI 10.1016/j.nbt.2023.05.004

IP 5.400

Esterhuizen, M., Lutsko, M., Kim, Y., Yoon, H., Park, C.-B., Kim, Y.-J., **Pflugmacher, S.** (2023): Titanium (IV) oxide anatase nanoparticles as vectors for diclofenac: assessing the antioxidative responses to single and combined exposures in the aquatic macrophyte *Egeria densa*. *Ecotoxicology*, 32, 394-402.

IP 2.700

2022

Esterhuizen, M., Buchenhorst, L., Kim, Y.J., **Pflugmacher, S.** (2022): In vivo oxidative stress responses of the freshwater basket clam *Corbicula javanicus* to microplastic fibres and particles. *Chemosphere*, 296, DOI 10.1016/j.chemosphere.2022.134037.

IP 8.800

Esterhuizen, M., Vikfors, S., Penttinen, O.-P., Kim, Y.-J., **Pflugmacher, S.** (2022): *Lolium multiflorum* germination and growth affected by virgin, naturally and artificially aged high-density polyethylene microplastic and leachates. *Front. Environ. Sci.*, 10, DOI 10.3389/fenvs.2022.964230

IP 4.600

Esterhuizen, M., vonWolff, A., Kim, Y.-J., **Pflugmacher, S.** (2022): Ecotoxicological implications of leachates from concrete demolition debris on oligochaetes: survival and oxidative stress status. *Heliyon*, 8, DOI 10.1016/j.heliyon.2022.e11237.

IP: 3.776

Esterhuizen, M., vonWolff, A., Kim, Y., **Pflugmacher, S.** (2022): Ecotoxicological Implications of leachates from concrete demolition debris on oligochaetes: Survival and oxidative stress status. *SSRN Electronic Journal*, DOI 10.2139/ssrn.4206718

IP: 1.000

2021

Pflugmacher, S., Tallinen, S., Kim, Y.-J., Kim, S., Esterhuizen, M. (2021): Ageing affects microplastic toxicity over time: Effects of aged polycarbonate on germination, growth, and oxidative stress of *Lepidium sativum*. *Science of the Total Environment*, 790, 148166.

IP: 7.963

Pflugmacher, S., Tallinen, S., Mitrovic, S., Penttinen, O.-P., Kim, Y.-J., Kim, S., Esterhuizen, M. Case study comparing effects of microplastic derived from bottle caps collected in two cities on *Triticum aestivum* (wheat). *Environments*, 8, DOI 10.3390/environments8070064.

IP: 3.700

Esterhuizen, M., Schmitner, N., **Pflugmacher, S.** (2021): Bioavailability of microcystin-LR in two different soil types to the legume Alfalfa *Medicago sativa* L. *International Journal of Environmental Science and Technology*. DOI 10.1007/s13762-021-03132-5.

IP: 2.740

Esterhuizen, M., Behman, S., Wang, L., Kim, Y.J., **Pflugmacher, S.** (2021): Mycoremediation of acetaminophen: Culture parameter optimization to improve efficiency. *Chemosphere*, 263, 8, 128117.

IP: 7.086

Kuoppamäki, K., **Pflugmacher, S.**, Scopetani, C., Setälä, H. (2021): The ability of selected filter materials in removing nutrients, metals, and microplastics from stormwater in biofilter structures. *Journal of Environmental Quality*, 50, 2, 465-475.

IP: 2.630

Omidi, A., **Pflugmacher, S.**, Kaplan, A. Kim, Y.J., Esterhuizen, M. (2021): Reviewing Interspecies Interactions as a Driving Force Affecting the Community Structure in Lakes *via* Cyanotoxins. *Microorganisms*, 9, 1583. DOI 10.3390/microorganisms9081583.

IP: 3.863

2020

Pflugmacher, S., Huttunen, J., von Wolff, M.-A., Penttinen, O.-P., Kim, Y., Kim, S., Mitrovic, S., Esterhuizen, M. (2020): *Enchytraeus crypticus* avoid soil spiked with microplastic. *Toxics*, 8,1, 1-10.

IP: 3.791

Esterhuizen, M., **Pflugmacher, S.** (2020): Large-scale Green Liver System for Sustainable Purification of Aquacultural Wastewater: Construction and case study in a semiarid area of Brasil (Itacuruba, Pernambuco) using the naturally occurring cyanotoxin microcystin as efficiency indicator. *Toxins*, 12, 11-14.

IP: 4.090

Siipola, V., **Pflugmacher, S.**, Romar, H., Wendling, L., Koukkari, P. (2020): Low-cost biochar adsorbents for water purification including microplastics removal. *Applied Sciences*, 10, 3; 18.

IP: 2.679

Scopetani, C., Esterhuizen, M., Cincinelli, A., **Pflugmacher, S.** (2020): Microplastics exposure causes negligible effects on the oxidative response enzymes glutathione reductase and peroxidase in the oligochaete *Tubifex tubifex*. *Toxics*, 8, 14-21.

IP: 4.200

Esterhuizen, M., Sani, S.B., Wang, L., Kim, Y.-J., **Pflugmacher, S.** (2020): Mycoremediation of acetaminophen: Culture parameter optimization to improve efficacy. *Chemosphere*, 263, DOI 10.1016/chemosphere.2020.128117.

IP: 7.045

Scopetani, C., Esterhuizen-Londt, M., Chelazzi, D., Cincinelli, A., Setälä, H., **Pflugmacher, S.** (2020): Self-contamination from clothing in microplastic research. *Ecotoxicology and Environmental Safety*, 189, 7, 110036.

IP: 6.230

Pflugmacher, S., Sulek, A., Mader, H., Heo, J., Noh, J.H., Penttinen, O.-P., Kim, Y., Kim, S., Esterhuizen, M. (2020): The influence of new and artificial aged microplastic and leachates on the germination of *Lepidium sativum* L. *Plants*, 9, 3, 1-18.

IP: 0.892

2019

Omidi, A., Esterhuizen-Londt, M., **Pflugmacher, S.** (2019): *Desmodesmus subspicatus* co-cultures with microcystin producing (PCC7806) and the non-producing (PCC 7005) strains of *Microcystis aeruginosa*. *Ecotoxicology*, 9: 1-9.

IP: 5.170

Omidi, A., Esterhuizen-Londt, M., **Pflugmacher, S.** (2019): Interspecies interactions between *Microcystis aeruginosa* PCC 7806 and *Desmodesmus subspicatus* SAG 86.81 in a co-cultivation system at various growth phases. *Environment International*, 131: 105052.

IP: 7.943

Calado, S.L.D.M., Esterhuizen-Londt, M., de Assis, H.C.S., **Pflugmacher, S.** (2019): Phytoremediation: Green technology for the removal of mixed contaminants of a water supply reservoir. *International Journal of Phytoremediation*, 21: 372-379.

IP: 2.528

Pflugmacher, S., Sulk, A., Kim, S., Esterhuizen-Londt, M. (2019): Translocation of the cyanobacterial toxin microcystin-LR into guttation drops of *Triticum aestivum* and remaining toxicity. *Environmental Pollution*, 253; 61-67.

IP: 7.140

Esterhuizen-Londt, M., **Pflugmacher, S.** (2019): Vegetables cultivated with exposure to pure and naturally occurring beta-N-methylamino-L-alanine (BMAA) *via* irrigation. *Environmental Research*, 169, 357-361.

IP: 5.715

Winter, L., **Pflugmacher, S.**, Berger, M., Finkbeiner, M. (2019): Feasibility of applying the biodiversity impact assessment method BIA+: A case study on freshwater biodiversity impacts resulting from phosphorus and 1,4-DGB emitted during the biodiesel production. *Ecological Indicators*, 102; 666-672.

IP: 4.229

deMedeiros, I.U., deMedeiros, R.A., Bortolin, R.H., deQueiroz, F.M., Silbiger, V.N., **Pflugmacher, S.**, Schwarz, A. (2019): Genotoxicity and pharmacokinetic characterization of *Cereus jamacaru* ethanolic extract in rats. *Bioscience Reports*, 39; 1-11.

IP: 2.780

Lukaszewicz, G., Iturburu, F.G., Garanzini, D., Menone, M., **Pflugmacher, S.** (2019): Imidacloprid modifies the mitotic kinetics and causes both an eugenic and clastogenic effects in the macrophyte *Bidens laevis* L. *Heliyon*, 5,5,7,p., 02118.

IP: 0.432

Esterhuizen-Londt, M., Behman, S., Wang, L., **Pflugmacher, S.** (2019): Improving mycoremediation of acetaminophen: Effects of pH, nitrogen limitation and co-cultivation.

https://cest2019.gnest.org/sites/default/files/presentation_file_list/cest2019_00751_oral_paper.pdf

IP: 7.086

Flores-Rojas, N.C., Esterhuizen-Londt, M., **Pflugmacher, S.** (2019): Uptake, growth, and pigment changes in *Lemna minor* L., exposed to environmental concentrations of cylindrospermopsin. *Toxins*, 11(11), [650]. DOI 10.3390/toxins11110650.

IP: 3.531

2018

Ongey, E.L., **Pflugmacher, S.**, Neubauer, P. (2018): Bioinspired designs, molecular premise, and tools for evaluating the ecological importance of antimicrobial peptides. *Pharmaceuticals*, 11(3):68. Doi: 10.3390/ph11030068.

IP: 3.585

Ferreira, T.C.R., Esterhuizen-Londt, M., Zaiat, M., **Pflugmacher, S.** (2018): Fate of enrofloxacin in lake sediment: biodegradation, transformation product identification and ecotoxicological implications. *Soil & Sediment Contamination*, 27, 357-368.

IP: 1.130

Wu, L., **Pflugmacher, S.**, Yang, A., Esterhuizen-Londt, M. (2018): Photocatalytic degradation of microcystin-LR by modified high-energy titanium dioxide: Kinetics and mechanism study of HF8. *Journal of Earth Sciences & Environmental Studies*, 3: 1-9.

IP: 1.250

Contardo-Jara, V., Schwanemann, T., Esterhuizen-Londt, M., **Pflugmacher, S.** (2018): Protein association of beta-N-methylamino-L-alanine in *Triticum aestivum* *via* irrigation. *Food additives & contamination Part A*, 35: 731-739.

IP: 2.200

Esterhuizen-Londt, M., Baik, S., Kwon, K.-S., Ha, M.-H., Oh, H.-M. **Pflugmacher, S.** (2018): Toxicity and toxin composition of *Microcystis aeruginosa* from Wangsong Reservoir. *Toxicology & Environmental Health Sciences*, 10; 179-185.

IP: 0.720

Märkl, V., **Pflugmacher, S.**, Stephan, D.A. (2018): Effects of leached cement paste samples with different superplasticiser content on germination and initial root growth of white mustard (*Sinapis alba*) and cress (*Lepidium sativum*). *Water, Air and Pollution*, 228; 3-7.

IP: 1.910

Märkl, V., **Pflugmacher, S.**, Stephan, D.A. (2018): Leaching of PCE-based superplasticiser from microfine cement: a chemical and ecotoxicological point of view. *Water, Air & Soil Pollution*, 14-20.

IP: 1.910

Märkl, V., **Pflugmacher, S.**, Reichert, A., Stephan, D.A. (2018): Leaching of polyurethane systems for waterproofing purposes while curing. *Water, Air & Soil Pollution*, 228, 8-12.

IP: 1.910

2017

Esterhuizen-Londt, M., Hendel, A.-L., **Pflugmacher, S.** (2017): Mycoremediation of diclofenac using *Mucor hiemalis*. *Toxicology and Environmental Chemistry*, 99; 795-808.

IP: 0.920

Spengler, A., Wanninger, L., **Pflugmacher, S.** (2017): Oxidative stress mediated toxicity of TiO₂ nanoparticles after a concentration and time dependent exposure of the aquatic macrophyte *Hydrilla verticillata*. *Aquatic Toxicology*, 190; 32-39.

IP: 4.052

Ongez, L.E., Yassi, H., **Pflugmacher, S.**, Neubauer, P. (2017): Pharmacological and pharmacokinetic properties of lanthipeptides undergoing clinical studies. *Biotechnology Letters*, 39; 473-482.

IP: 1.847

Balsano, E., Esterhuizen-Londt, M., Hoque, E., **Pflugmacher, S.** (2017): Responses of the antioxidative and biotransformation enzymes in the aquatic fungus *Mucor hiemalis* exposed to cyanotoxins. *Biotechnology Letters*, 39: 1201-1209.

IP: 1.847

Scholz, S.N., Esterhuizen-Londt, M., **Pflugmacher, S.** (2017): Rise of toxic cyanobacterial blooms in temperate freshwater lakes: causes, correlations, and possible countermeasures. *Toxicological and Environmental Chemistry*, 99, 543-577.

IP: 0.935

Ferrao-Filho da Silva, A., deAbreu, S., deOliveira, T.A., deMagalhaes Freitas, V., **Pflugmacher, S.**, daSilva Mendes, E. (2017): Single and combined effects of microcystin- and saxitoxin-producing cyanobacteria on the fitness and antioxidant defense of cladocerans. *Environmental Toxicology and Chemistry*, 36: 2689-2697.

IP: 3.329

Omidi, A., Esterhuizen-Londt, M., **Pflugmacher, S.** (2017): Still challenging: the ecological function of the cyanobacterial toxin microcystin - What we know so far. *Toxin Reviews*, 37: 87-105.

IP: 3.273

Vilvert, E., Contardo-Jara, V., Esterhuizen-Londt, M., **Pflugmacher, S.** (2017): The effect of oxytetracycline on physiological and enzymatic defense responses in aquatic plant species *Egeria densa*, *Azolla caroliniana* and *Taxiphyllum barbieri*. *Toxicological and Environmental Chemistry*, 99; 104-116.

IP: 0.935

Iturburu, F., Zoemisch, M., Panzeri, A.M., Crupkin, A.C., **Pflugmacher, S.**, Menone, M. (2017): Uptake, distribution in different tissues and genotoxicity of imidacloprid in the freshwater fish *Australoheros facetus*. *Environmental Toxicology and Chemistry*, 9; 699-708.

IP: 3.329

Esterhuizen-Londt, M., Hertel, S., **Pflugmacher, S.** (2017): Uptake and biotransformation of pure microcystin-LR versus microcystin-LR from a natural cyanobacterial bloom extract in the aquatic fungus *Mucor hiemalis*. *Biotechnology Letters*, 39: 1537-1545.

IP: 1.847

Winter, L., **Pflugmacher, S.**, Berger, M., Finkbeiner, M. (2017): Biodiversity Impact Assessment (BIA+) – methodological framework for screening biodiversity. *Integrated Environmental Assessment and Management*, 14, DOI 10.1002/ieam.2006.

IP: 3.100

2016

Pflugmacher, S. (2016): Biotransformation of Microcystins in Eukaryotic Cells – possible Future Research Directions. *Rev. Med. Chem.* 16: 1078-1083.

IP: 2.120

Pflugmacher, S.; Kwon, K.S.; Baik, S.; Kim, S., Kuehn, S., Esterhuizen-Londt, M. (2016): Physiological responses of *Cladophora glomerata* to cyanotoxins: a potential new phytoremediation species for the Green Liver Systems. *Toxicological and Environmental Chemistry*, 98: 241-259.

IP: 0.935

Esterhuizen-Londt, M., Schwartz, K., Balsano, E., Kuehn, S., **Pflugmacher, S.** (2016): LC-MSMS method development for the quantitative analysis of acetaminophen uptake by the aquatic fungus *Mucor hiemalis*. *Ecotoxicology and Environmental Safety*, 128: 230-235.

IP: 4.290

Balsano, E. Esterhuizen-Londt, M., Hoque, E., **Pflugmacher, S.** (2016): Fungal pellets as potential tools to control water pollution: Strategic approach for the pelletization and subsequent microcystin-LR uptake by *Mucor hiemalis*. *Journal of Applied Biology and Biotechnology*, 4: 31-41.

IP: 0.850

Esterhuizen-Londt, M., **Pflugmacher, S.** (2016): Inability to detect free cylindrospermopsin in spiked aquatic organism extracts plausibly suggests protein binding. *Toxicon*, 122: 89-93.

IP: 2.470

Okupnik, A., **Pflugmacher, S.** (2016): Oxidative stress response of the aquatic macrophyte *Hydrilla verticillata* exposed to TiO₂ nanoparticles. *Environmental Toxicology & Chemistry*, 35: 2859-2866.

IP: 3.021

Esterhuizen-Londt, M., von Schnehen, M., Kühn, S., **Pflugmacher, S.** (2016): Oxidative stress responses in the animal model *Daphnia pulex* exposed to a natural bloom extract versus artificial cyanotoxin mixtures. *Aquatic Toxicology*, 179: 151-57.

IP: 4.369

Hillebrand, M., **Pflugmacher, S.**, Hahn, A. (2016): Toxicological risk assessment in CO₂ capture and storage technology. *International Journal of Greenhouse Gas Control*, 55: 118-143.

IP: 4.170

Esterhuizen-Londt, M., Schwartz, K., **Pflugmacher, S.** (2016): Using aquatic fungi for pharmaceutical bioremediation: Uptake of acetaminophen by *Mucor hiemalis* does not result in an enzymatic oxidative stress response. *Fungal Biology*, 120: 1249-1257.

IP: 2.468

Jekel, M., Baur, N., Böckelmann, U., Duennbier, U., Eckhard, A., Gnirss, R., Grummt, T., Hummelt, D., Lucke, T., Meinel, F., Miehe, U., Mollenhauer, G., Mutz, D., Petersohn, D., **Pflugmacher, S.**, Reemtsma, T., Remy, C., Schaller, J., Schlittenbauer, L., Schrapel, J., Schulz, W., Seiwert, B., Sperlich, A., Stapf, M., vanBaar, P., Wenzel, M., Wode, F., Zietzschmann, F., Ruhl, A.S. (2016): Anthropogene Spurenstoffe und Krankheitserreger im urbanen Wasserkreislauf: Bewertung, Barrieren und Risikokommunikation (ASKURIS). Universitätsverlag TU Berlin, Hrgs. M. Jekel & A.S. Ruhl, DOI 10.14279/depositonce-4979.

IP:-

2015

Flores-Rojas, N.C.; Esterhuizen-Londt, M.; **Pflugmacher, S.** (2015): Antioxidative stress responses in the floating macrophyte *Lemna minor* L. with cylindrospermopsin exposure. *Aquatic Toxicology*, 169: 188-195.

IP: 3.557

Esterhuizen-Londt, M.; Kuehn, S.; **Pflugmacher, S.** (2015): Development and validation of an in-house quantitative analysis method for cylindrospermopsin using hydrophilic interaction liquid chromatography-tandem mass spectrometry: Quantification demonstrated in four aquatic organisms. *Environmental Toxicology and Chemistry*, 34: 2878-2883.

IP: 3.526

Romero-Oliva, C.S.; Contardo-Jara, V.; **Pflugmacher, S.** (2015): Time dependent uptake, bioaccumulation and biotransformation of cell free crude extract microcystins from Lake Amatitlan, Guatemala by *Ceratophyllum demersum*, *Egeria densa* and *Hydrilla verticillata*. *Toxicon*, 105: 62-73.

IP: 2.651

Okupnik, A.; Contardo-Jara, V.; **Pflugmacher, S.** (2015): Potential role of engineered nanoparticles as contaminant carriers in aquatic ecosystems: Estimating sorption processes of the cyanobacterial toxin microcystin-LR by TiO₂ nanoparticles. *Colloids and Surfaces A-Physicochemical And Engineering Aspects*, 481: 460-467.

IP: 3.075

Contardo-Jara, V.; Kuehn, S.; **Pflugmacher, S.** (2015): Single and combined exposure to MC-LR and BMAA confirm suitability of *Aegagropila linmaei* for use in green liver systems (R)-A case study with cyanobacterial toxins. *Aquatic Toxicology*, 165: 101-108.

IP: 4.007

Jung, Y. J.; Park, C.B.; Kim, Y.; Kim, S., **Pflugmacher, S.**, Baik, S. (2015): Application of Multi-Species Microbial Bioassay to Assess the Effects of Engineered Nanoparticles in the Aquatic Environment: Potential of a Luminous Microbial Array for Toxicity Risk Assessment (LumiMARA) on Testing for Surface-Coated Silver Nanoparticles. *International Journal of Environmental Research and Public Health*, 12: 8172-8186.

IP: 2.506

Romero-Oliva, C.S.; Contardo-Jara, V.; **Pflugmacher, S.** (2015): Antioxidative response of the three macrophytes *Ceratophyllum demersum*, *Egeria densa*, and *Hydrilla verticillata* to a time dependent exposure of cell-free crude extracts containing three microcystins from cyanobacterial blooms of Lake Amatitlan, Guatemala. *Aquatic Toxicology*, 163: 130-139

IP: 4.007

Lee, S; Kwon, K.-S.; Ryu, J.C.; Song, M.K.; **Pflugmacher, S.**; Park, C., Lee, S.H., Park, C.H.; Choi, J.W. (2015): Effective Treatment of Nutrients by Adsorption onto the Surface of a Modified Clay and a Toxicity Evaluation of the Adsorbent. *Water Air and Soil Pollution*, 226: 111-116.

IP: 1.731

Burkhardt, M., Duester, L., Iivonen, O., Lange, T., Meermann, B., **Pflugmacher, S.**, Schröter, N., Stephan, D. (2017): Rückblick Symposium "Bauchemie und Wasserqualität". *Vom Wasser*, 115, 126-128.

IP: 0.1800

Balsano, E., Esterhuizen, M., Hoque, E., **Pflugmacher, S.** (2015): Toxin resistance in aquatic fungi poses environmentally friendly remediation possibilities: A study on the growth responses and biosorption potential of *Mucor hiemalis* EH5 against cyanobacterial toxins. *Mycoses*, 1, DOI 10.16966/ijwwwt.101.

IP: 4.931

Pflugmacher, S. (2015): Green Liver Systems for Water Purification – Using the Phytoremediation potential of aquatic macrophytes for the removal of different cyanobacterial toxins from water. *American Journal of Plant Science*, 6, 1607-1618, DOI 10.4236/ajps.2015.69161.

IP: 1.200

2014

Contardo-Jara, V. Schwanemann, T., **Pflugmacher, S.** (2014): Uptake of a cyanotoxin, beta-N-methylamino-L-alanine, by wheat (*Triticum aestivum*). *Ecotoxicology and Environmental Safety*, 104: 127-131.

IP: 3.250

Romero-Oliva, C.S., Contardo-Jara, V., Block, T., **Pflugmacher, S.** (2014): Accumulation of microcystin congeners in different aquatic plants and crops - A case study from lake Amatitlan, Guatemala. *Ecotoxicology and Environmental Safety*, 102, 121-128.

IP: 3.250

Downing, Simone; Contardo-Jara, Valeska; **Pflugmacher, S.**, Downing, T. (2014): The fate of the cyanobacterial toxin beta-N-methylamino-L-alanine in freshwater mussels. *Ecotoxicology and Environmental Safety*, 101, 51-58.

IP: 3.250

Ha, M.-H. Contardo-Jara, V. **Pflugmacher, S.** (2014): Uptake of the cyanobacterial neurotoxin, anatoxin-a, and alterations in oxidative stress in the submerged aquatic plant *Ceratophyllum demersum*. *Ecotoxicology and Environmental Safety*, 101, 205-212.

IP: 3.250

Contardo-Jara, V., Otterstein, S.K.B., Downing, S., Downing, T.G., **Pflugmacher, S.** (2014): Responses of antioxidant and

biotransformation systems of selected freshwater mussels (*Dreissena polymorpha*, *Anadonta cygnea*, *Unio tumidus* and *Corbicula javanicus*) to the cyanobacterial neurotoxin beta-N-methylamino-L-alanine. *Toxicological and Environmental Chemistry*, 96, DOI 10.1080/02772248.2014.945452.

IP: 1.565

2013

Hillebrand, M., **Pflugmacher, S.**, Hahn, A. (2013) Toxicological risk assessment in carbon capture and storage technology. *Toxicology Letters*, 221, 116-116.

IP: 3.738

Ha, Mi-Hee, **Pflugmacher, S.** (2013) Time-dependent alterations in growth, photosynthetic pigments and enzymatic defense systems of submerged *Ceratophyllum demersum* during exposure to the cyanobacterial neurotoxin anatoxin-a. *Aquatic Toxicology*, 138, 26-34.

IP: 3.911

Thi, Thuy Duong, Thi Phuong Quynh, Thanh-So, Dao, **Pflugmacher, S.** (2013): Seasonal variation of cyanobacteria and microcystins in the Nui Coc Reservoir, Northern Vietnam. *Journal of Applied Phycology*, 25, 1065-1075.

IP: 2.326

Ha, Mi-Hee, **Pflugmacher, S.** (2013): Phytotoxic effects of the cyanobacterial neurotoxin anatoxin-a: Morphological, physiological and biochemical responses in aquatic macrophyte, *Ceratophyllum demersum*. *Toxicon*, 70, 1-8.

IP: 2.878

Zikova, A., Lorenz, C., Lutz, I., **Pflugmacher, S.**, Kloas, W. (2013): Physiological responses of *Xenopus laevis* tadpoles exposed to cyanobacterial biomass containing microcystin-LR. *Aquatic Toxicology*, 128, 25-33.

IP: 3.911

Contardo-Jara, V., Funke, M., Peuthert, A., **Pflugmacher, S.** (2013): beta-N-methylamino-L-alanine exposure alters defense against oxidative stress in aquatic plants *Lomariopsis lineata*, *Fontinalis antipyretica*, *Riccia fluitans* and *Taxiphyllum barberi*. *Ecotoxicology & Environmental Safety*, 88, 72-78.

IP: 2.931

Jekel, M., Ruhl, A.S., Meinel, F., Zietzschmann, **Pflugmacher, S.**, Baur, N., Wemzel, M., Gnirss, R., Sperlich, A., Duennbier, U., Böckelmann, U., Hummelt, D., vanBaar, P., Wode, F., Petersohn, D., Grummt, T., Eckhardt, A., Schulz, W., Heermann, A., Reemtsma, T., Seiwert, B., Schlittenbauer, L., Lesjean, B., Miede, U., Remy, C., Stapf, M., Mutz, D. (2013): Anthropogenic organic micro-pollutants and pathogens in the urban water cycle: Assessment, barriers and risk communication (ASKURIS). *Environmental Sciences Europe*, 25 DOI 10.1186/2190-4715-25-20.

IP: -

2012

Lundgren, Veronica, Graneli, E., **Pflugmacher, S.** (2012) Influence of *Acartia cf. Bifilosa* (Copepoda) on morphology and toxicology of *Nodularia spumigena* (Cyanophyceae). *Harmful Algae*, 18, 35-46.

IP: 3.147

Lorenz, C., Contardo-Jara, V., Trubiroha, A., **Pflugmacher, S.**, Kloas, W. (2012): The synthetic gestagen levonogestrel disrupts sexual development in *Xenopus laevis* by affecting gene expression of pituitary gonadotropins and gonadal steroidogenic enzymes. *Toxicological Science*, 124, 311-319.

IP: 4.924

2011

Esterhuizen-Londt, M., **Pflugmacher, S.**, Downing, T.G. (2011): The effect of beta-N-methylamino-L-alanine (BMAA) on oxidative stress response enzymes of the macrophyte *Ceratophyllum demersum*. *Toxicon*, 10-15.

IP: 2.957

Esterhuizen-Londt, M., **Pflugmacher, S.**, Downing, T.G. (2011): beta-N-Methylamino-L-alanine (BMAA) uptake by the aquatic macrophyte *Ceratophyllum demersum*. *Ecotoxicology & Environmental Safety*, 74, 74-77.

IP: 2.705

Contardo-Jara, V., Lorenz, C., **Pflugmacher, S.**, Kloas, W. (2011): Exposure to human pharmaceutical Carbamazepine, Ibuprofen and Bezafibrate causes molecular effects in *Dreissena polymorpha*. *Aquatic Toxicology*, 105, 428-437.

IP: 4.348

Lorenz, C., Contardo-Jara, **Pflugmacher, S.**, Kloas, W. (2011): The synthetic gestagen levonorgestrel impairs metamorphosis in *Xenopus laevis* by disruption of the thyroid system. *Toxicological Science*, 123, 94-102.

IP: 2.957

Esterhuizen-Londt, M., **Pflugmacher, S.**, Downing, T. (2011): The effect of beta-N-methylamino-L-alanine (BMAA) on oxidative stress response enzymes of the macrophyte *Ceratophyllum demersum*. *Toxicon*, 57, 803-810.

IP: 2.957

Esterhuizen-Londt, M., **Pflugmacher, S.**, Downing, T. (2011): beta-N-methylamino-L-alanine (BMAA) uptake by the aquatic macrophyte *Ceratophyllum demersum*. *Ecotoxicology & Environmental Safety*, 74, 74-77.

IP: 2.705

Contardo-Jara, V., Lorenz, C., **Pflugmacher, S.**, Kloas, W. (2011): Molecular effects and bioaccumulation of levonorgestrel in the non-target organism *Dreissena polymorpha*. *Environmental Pollution*, 159, 38-44.

IP: 4.266

Duong, T.T., Le, T.P.Q., Dao, S.T., **Pflugmacher, S.** (2011): Cyanobacteria and their toxins in the Nui Coc reservoir (Thai Nguyen province). *Journal of Chemistry (Tap chi Hoa hoc T.)* 49, 565-569. ISSN 0866-7144.

IP: -

2010

Pflugmacher, S., Olin, M., Kankaanpää, H. (2010): Oxidative stress response in the red alga *Furcellaria lumbricalis* (Huds.) Lamour. Due to exposure and uptake of the cyanobacterial toxin nodularin from *Nodularia spumigena*. *Harmful Algae*, 10: 49-55.

IP: 3.315

Pichardo, S. **Pflugmacher, S.** (2010): Study of the antioxidant response of several bean variants to irrigation with water containing MC-LR and cyanobacterial crude extract. *Environmental Toxicology*, 26, 300-306.

IP: 1.860

Zikova, A., Trubiroha, A., Wiegand, C., Wuertz, S., Rennert, B., **Pflugmacher, S.**, Kopp, R., Mares, J., Spurny, P., Kloas, W. (2010): Impact of microcystin containing diets on the physiological performance of Nile tilapia (*Oreochromis niloticus*) concerning detoxification. *Journal of Environmental Monitoring*, 12, 2276-2281.

IP: 1.866

Krüger, T., Wiegand, C., Li, K., **Pflugmacher, S.** (2010): More and more toxins around – Analysis of cyanobacterial strains isolated from Lake Chao (Anhui Province, China). *Toxicon*, 56, 1520-1524.

IP: 2.582

Pflugmacher, S., Olin, M., Kankaanpää, H. (2010): Oxidative stress response in the red alga *Furcellaria lumbricalis* due to exposure and uptake of the cyanobacterial toxin nodularin from *Nodularia spumigena*, *Harmful Algae*, 10, 49-55.

IP: 4.529

Hermelink, B., Urbatzka, R., Wiegand, C., **Pflugmacher, S.** (2010): Aqueous leaf extracts display endocrine activities in vitro and disrupts differentiation of male *Xenopus laevis* tadpoles in vivo. *General & Comparative Endocrinology*, 168, 245-255.

IP: 3.197

Peuthert, A., **Pflugmacher, Stephan** (2010): Influence of cyanotoxin microcystin-LR on tocopherol in Alfalfa (*Medicago sativa*). *Toxicon*, 56, 411-417

IP: 2.582

Schwarz, A., Medeiros, I., **Pflugmacher, S.** (2010): Phytochemical and toxic analysis of an ethanol extract from *Cereus jamacaru*. *Toxicology Letters*, 196, 344-354.

IP: 3.696

Hermelink, B., Urbatzka, R., Wiegand, C., **Pflugmacher, S.** (2010): Aqueous leaf extracts display endocrine activities in vitro and disrupts differentiation of male *Xenopus laevis* tadpoles in vivo. *General & Comparative Endocrinology*, 168, 245-255.
IP: 3.197

2009

Jos, A., Camean, A. M., **Pflugmacher, S.**, Segner, H. (2009): The antioxidant glutathione in the fish cell lines EPC and BCF-2: Response to model pro-oxidants as measured by three different fluorescent dyes. *Toxicology*, 23: 546-553.
IP: 1.159

Grigutyte, R., Nimptsch, J., Manusadzianas, L., **Pflugmacher, S.** (2009): Maurabragio dumblio (*Nitellopsis obtuse*) oksidacinio streso ferment atsakas paveikus buko (*Fagus sylvatica*) lapu ekstraktu. *Biologija*, 55, 142-149, DOI 10.2478/v10054-009-0021-4.
IP: -

2008

Nimptsch, J., **Pflugmacher, S.** (2008): Decomposing leaf litter: The effect of allochthonous degradation products on the antioxidant fitness and photosynthesis of *Vesicularia dubyana*. *Ecotoxicology and Environmental Safety* 69: 541–545.
IP: 2.784

Peuthert, A., Lawton, L., **Pflugmacher, S.** (2008): In vivo influence of cyanobacterial toxins on enzyme activity and gene expression of protein phosphatases in Alfalfa (*Medicago sativa*). *Toxicon*, 52, 84-90.
IP: 2.742

Contardo-Jara, V., **Pflugmacher, S.**, Wiegand, C. (2008): Multi-xenobiotic-resistance a possible explanation for the insensitivity of bivalves towards cyanobacterial toxins. *Toxicon*, 52, 936-943, DOI 10.1016/j.toxicon.2008.09.005.
IP: 3.035

Nimptsch, J., Wiegand, C., **Pflugmacher, S.** (2008): Cyanobacterial toxin elimination via bioaccumulation of MC-LR in aquatic macrophytes: An application of the “Green Liver Concept”. *Environmental Science & Technology*, 42, 8552-8557, DOI 10.1021/es8010404.
IP: 11.357

Sipiä, V., Franson, J.C., Sjövall, O., **Pflugmacher, S.**, Shearn-Bochsler, V., Rocke, T.E., Meriluoto, J. (2008): Exposure of mallards (*Anas platyrhynchos*) to the hepatotoxic cyanobacterium *Nodularia spumigena*. *Toxicological & Environmental Chemistry*, 90, 437-444, DOI 10.1080/02772240701529103.
IP: 4.218

Vassilakaki, M., **Pflugmacher, S.** (2008): Oxidative stress response of *Synechocystis sp.* (PCC 6803) due to exposure to microcystin-LR and cell-free cyanobacterial crude extract containing microcystin-LR. *Journal of Applied Phycology*, 20, 219-225, DOI 10.1007/s10811-007-9222-3.
IP: 3.404

Pegram, R., Nichols, T., McLeroy, S., Humpage, A., LeBlanc, S., Love, A., Neilan, B.A., **Pflugmacher, S.**, Runnegar, M., Thacker, R.W. (2008): Cyanotoxins Workgroup Report. *Advances in Experimental Medicine and Biology*, 619, 317-381, DOI 10.1007/978-0-387-75865-7_15
IP: 3.650

Kamara, S., **Pflugmacher, S.** (2008): Effects of leaf extracts on glutathione reductase expression, hydrogen peroxide and glutathione contents in the aquatic macrophyte *Ceratophyllum demersum*. *Aquatic Sciences*, 70, 204-211, DOI 10.1007/s00027-008-8048-7.
IP: 2.755

Grigutyte, R., Nimptsch, J., Manusadzianas, L., **Pflugmacher, S.** (2008): Effects of decomposing leaf litter from *Fagus sylvatica* and *Quercus robur* of different degradation levels on oxidative stress response in the charophyte *Nitellopsis obtusa*. *Botanica Lithuanica*, 14, 233-240.
IP: -

2007

Nimptsch, J., **Pflugmacher, S.** (2007): Ammonia triggers the promotion of oxidative stress in the aquatic macrophyte *Myriophyllum mattogrossense*. *Chemosphere*, 66, 708-714.

IP: 2.941

Kamara, S., **Pflugmacher, S.** (2007): Acclimation of *Ceratophyllum demersum* to stress imposed by *Phragmites australis* and *Quercus robur* leaf extracts. *Ecotoxicology and Environmental Safety*, 68, 335-342. **(Rated as Highlighted Article)**.

IP: 2.218

Pflugmacher, S., Olin, M., Kankaanpää, H. (2007): Nodularin induces oxidative stress in the Baltic Sea brown alga *Fucus vesiculosus* (Phaeophyceae). *Marine Environmental Research*, 64: 149-159.

IP: 1.791

Stüven, J., **Pflugmacher, S.** (2007): Antioxidative stress response of *Lepidium sativum* due to exposure to cyanobacterial secondary metabolites. *Toxicon*, 50, 85-93.

IP: 2.498

Pflugmacher, S. (2007): Reduction in germination rate and elevation of peroxidase activity in *Zea mays* seedlings due to exposure to different microcystin analogues and toxic cell free cyanobacterial crude extract. *Journal of Applied Botany and Food Chemistry*, 81: 45-48.

IP: 0.645

Kamara, S., **Pflugmacher, S.** (2007): *Phragmites australis* and *Quercus robur* leaf extracts affect antioxidative system and photosynthesis of *Ceratophyllum demersum*. *Ecotoxicology and Environmental Safety*, 67, 240-246.

IP: 2.218

Peuthert, A., Chakrabarti, S., **Pflugmacher, S.** (2007): Uptake of microcystins-LR and -LF (cyanobacterial toxins) in seedlings of several important agricultural plant species and the correlation with cellular damage (lipid peroxidation). *Environmental Toxicology*, 22, 436-442.

IP: 1.860

Pflugmacher, S., Aulhorn, M., Grimm, B. (2007): Influence of a cyanobacterial crude extract containing microcystin-LR on the physiology and antioxidative defence systems of different spinach variants. *New Phytologist*, 175, 482-489.

IP: 5.516

Monferran, M.V., Wunderlin, D.A., Nimptsch, J., **Pflugmacher, S.** (2007): Biotransformation and Antioxidant Response in *Ceratophyllum demersum* Experimentally Exposed to 1,2- and 1,4-Dichlorobenzene. *Chemosphere*, 68, 2073-2079.

IP: 2.941

Hoque, E., **Pflugmacher, S.**, Fritscher, J., Wolf, M. (2007): Induction of Glutathione S-Transferase in Biofilms and Germinating Spores of *Mucor hiemalis* Strain EH5 from Cold Sulfidic Spring Waters. *Applied and Environmental Microbiology*, 73, 2697-2707.

IP: 4.309

Pflugmacher, S., Hoffmann, J., Hübner, B. (2007): Effects on growth and physiological parameters in wheat (*Triticum aestivum* L.) grown in soil and irrigated with cyanobacterial toxin contaminated water. *Environmental Toxicology and Chemistry*, 26, 2710-2716.

IP: 2.322

Vasconcelos, V.M., Wiegand, C., **Pflugmacher, S.** (2007): Dynamics of glutathione-s-transferases in *Mytilus galloprovincialis* exposed to toxic *Microcystis aeruginosa* cells, extracts and pure toxins. *Toxicon*, 50, 740-745.

IP: 2.498

2006

Pflugmacher, S., Jung, K., Lundvall, L., Neumann, S., Peuthert, A. (2006): Effects of cyanobacterial toxins and cyanobacterial cell-free crude extract on germination of Alfalfa (*Medicago sativa*) and induction of oxidative stress. *Environmental Toxicology and Chemistry*, 25, 2381-2387.

IP: 2.555

Luo, W., **Pflugmacher, S.**, Pröschold, T., Walz, N., Krienitz, L. (2006): Genotype versus Phenotype variability in *Chlorella* and *Micractinium* (Chlorophyta, Trebouxiophyceae). *Protist*, 157, 315-333.

IP: 3.261

Timofeyev, M.A., Shatilina, Z.M., Kolesnichenko, A.V., Kolesnichenko, V.V., **Pflugmacher, S.**, Steinberg, C.E.W. (2006): Natural organic matter (NOM) promotes oxidative stress in freshwater amphipods *Gammarus lacustris* Sars and *Gammarus tigrinus* Sexton. *The Science of the Total Environment*, 366, 673-681.

IP: 2.892

Ame, M.V., Echenique, J.-R., **Pflugmacher, S.**, Wunderlin, D.A. (2006): Degradation of Microcystin-RR by *Sphingomonas* sp. CBA4 Isolated from San Roque Reservoir Cordoba – Argentina). *Biodegradation*, 17, 447-455.

IP: 2.051

Pflugmacher, S., Pietsch, C., Rieger, W., Steinberg, C.E.W. (2006): Dissolved natural organic matter (NOM) impacts photosynthetic oxygen production and electron transport in coontail *Ceratophyllum demersum*. *The Science of the Total Environment* 357, 169-175.

IP: 2.892

Pietsch, C., Krause, E., Burnison, E., Steinberg, C.E.W., **Pflugmacher, S.** (2006): Effects and metabolism of the phenylurea herbicide isoproturon in the submerged macrophyte *Ceratophyllum demersum* L. *Journal of Applied Botany and Food Chemistry*, 80, 25-31.

IP: 0.582

Schmidt, K., **Pflugmacher, S.**, Staaks, G.B.O., Steinberg, C.E.W. (2006): The influence of tributyltin chloride and polychlorinated biphenyls on swimming behavior, body growth, reproduction, and activity of biotransformation enzymes in *Daphnia magna*. *Journal of Freshwater Ecology*, 21, 109-120.

IP: 0.309

Metcalf, J.S., Morrison, L.F., Krienitz, L., Ballot, A., Krause, E., Kotut, K., Pütz, S., Wiegand, C., **Pflugmacher, S.**, Codd, G.A. (2006): Analysis of the cyanotoxins anatoxin-a and microcystins in Lesser Flamingo feathers. *Toxicology and Environmental Chemistry*, 88, 159-167.

IP: 0.213

Pflugmacher, S., Pietsch, C., Rieger, W., Steinberg, C.E.W. (2006): Dissolved natural organic matter (NOM) impacts photosynthetic oxygen production and electron transport in coontail *Ceratophyllum demersum*. *The Science of the Total Environment* 357, 169-175.

IP: 2.892

Schmidt, K., **Pflugmacher, S.**, Staaks, G.B.O., Steinberg, C.E.W. (2006): The influence of tributyltin chloride and polychlorinated biphenyls on swimming behavior, body growth, reproduction, and activity of biotransformation enzymes in *Daphnia magna*. *Journal of Freshwater Ecology*, 21, 109-120.

IP: 0.309

2005

Nimptsch, J., Wunderlin, D.A., Dollan, A., **Pflugmacher, S.** (2005): Antioxidant and biotransformation enzymes in *Myriophyllum quitense* as biomarkers of heavy metal exposure and eutrophication in Suquia River basin (Cordoba, Argentina). *CHEMOSPHERE*, 61, 147-157.

IP: 2.590

Luo, W., Krienitz, L., **Pflugmacher, S.**, Walz, N. (2005): Genus and species concept in *Chlorella* and *Micractinium* (Chlorophyta, Chlorellaceae): genotype versus phenotypical variability under ecosystem conditions. *Verh. Internat. Verein. Limnol.*, 29, 170-173.

IP: 0.500

Menone, M.L. and **Pflugmacher, S.** (2005): Effects of 3-chlorobiphenyl on photosynthetic oxygen production, glutathione content and detoxication enzymes in the aquatic macrophyte *Ceratophyllum demersum*. *CHEMOSPHERE* 60, 79-84.

IP: 2.590

Wiegand, C. and **Pflugmacher, S.** (2005): Ecotoxicological effects of selected cyanobacterial secondary metabolites – A short review. *TOXICOLOGY and APPLIED PHARMACOLOGY*, 203, 201-218.

IP: 3.636

Ballot, A., Krienitz, L., Kotut, K., Wiegand, C., **Pflugmacher, S.** (2005): Cyanobacteria and cyanobacterial toxins in the alkaline crater lakes Sonachi and Simbi, Kenya. *HARMFUL ALGAE*, 4, 139-150.

IP: 3.018

Schmidt, K., Staaks, G.B.O., **Pflugmacher, S.**, Steinberg, C.E.W. (2005): Impact of PCB mixture (Arochlor 1254) and TBT and a mixture of both on swimming behaviour, body growth and enzymatic biotransformation activities (GST) of young carp (*Cyprinus carpio*). *AQUATIC TOXICOLOGY*, 71, 49-59.

IP: 2.811

Pflugmacher, S., Wiegand, C., Werner, S., Schröder, H., Kankaanpää, H. (2005): Activity and substrate specificity of cytosolic and microsomal glutathione S-transferase in Australian Black Tiger Prawns (*Penaeus monodon*) after exposure to cyanobacterial toxins. *ENVIRONMENTAL TOXICOLOGY*, 20, 301-307.

IP: 1.738

Baganz, D., Siegmund, R., Staaks, G., **Pflugmacher, S.**, Steinberg, C.E.W. (2005): Temporal pattern in swimming activity of two fish species (*Danio rerio* and *Leucaspius delineatus*) under chemical stress conditions. *BIOLOGICAL RHYTHM RESEARCH*, 36, 263-276.

IP: 0.556

Menone, M., Steinberg, C.E.W., **Pflugmacher, S.** (2005): Evaluation of photosynthetic oxygen production, pigment pattern, glutathione content and detoxication enzymes activity in the aquatic macrophyte *Ceratophyllum demersum* exposed to cypermethrin. *Journal of Applied Botany and Food Quality*, 79, 77-82.

IP: 0.908

Nimptsch, J., **Pflugmacher, S.** (2005): Substrate specificities of cytosolic glutathione S-transferases in five different species of the aquatic macrophyte *Myriophyllum*. *Journal of Applied Botany and Food Quality*, 79, 94-99.

IP: 0.908

Schmidt, K., **Pflugmacher, S.**, Staaks, G.B.O., Steinberg, C.E.W. (2005): Effects of subacute PCB-exposure (Arochlor 1254) on oxygen consumption, swimming behaviour and biotransformation (GST activity) of carp (*Cyprinus carpio*). *UWSF*, 17, 133-145.

IP: -

Schmidt, K., Steinberg, C.E.W., Staaks, G.B.O., **Pflugmacher, S.** (2005): Influence of a xenobiotic mixture (PCB and TBT) compared to single substances on swimming behavior or reproduction of *Daphnia magna*. *Acta Hydrochimica et Hydrobiologica*, 33: 287-300 SEP 2005.

IP: 0.890

Wu, Q., Riise, G., **Pflugmacher, S.**, Greulich, K., Steinberg, C.E.W. (2005): Combined effects of the fungicide propiconazole and agricultural runoff sediments on the aquatic bryophyte *Vesicularia dubyana*. *Environmental Toxicology and Chemistry* 24 (9): 2285-2290.

IP: 2.639

Krienitz, L., Ballot, A., Casper, P., Kotut, K., Wiegand, C., **Pflugmacher, S.** (2005): Cyanobacteria in hot springs of East Africa and their potential toxicity. *Algological Studies*, 117, 1-10.

IP: 1.000

Cazenave, J., Wunderlin, D.A., DelosAngeles Bistoni, M., Ame, M.V., Krause, E., **Pflugmacher, S.**, Wiegand, C. (2005): Uptake, Tissue Distribution and Accumulation of Microcystin-RR in *Corydoras paleatus*, *Jenynsia multidentata* and *Odontesthes bonariensis*. A Field and Laboratory Study. *Aquatic Toxicology*, 75, 178-190.

IP: 2.811

Krienitz, L., Ballot, A., Casper, P., Codd, G.A., Kotut, K., Metcalf, J.S., Morrison, L.F., **Pflugmacher, S.**, Wiegand, C. (2005): Contribution of toxic cyanobacteria to the mysterious deaths of Lesser flamingos at saline-alkaline lakes of Kenya. *Verh. Internat. Verein. Limnol.* 29, 783-786.

IP: -

2004

Pflugmacher, S. (2004): Promotion of oxidative stress in *C. demersum* due to exposure to cyanobacterial toxin. *Aquatic Toxicology*, 3, 169-178.

IP: 2.811

Baganz, D., Staaks, G, **Pflugmacher, S.**, Steinberg, C.E.W. (2004): A comparative study on microcystin-LR induced behavioural changes of two fish species (*Danio rerio* and *Leucaspis delineatus*). *Environmental Toxicology*, 19, 564-570.

IP: 1.556

Greulich, K., **Pflugmacher, S.** (2004): Uptake and effects on detoxication enzymes of cypermethrin in embryos and tadpoles of amphibians. *Achieves of Environmental Toxicology*, 47, 489-495.

IP: 1.899

Nogueira, I.C.G., Saker, M.L., **Pflugmacher, S.**, Wiegand, C., Vasconcelos, V. (2004): Toxicity of the cyanobacterium *Cylindrospermopsis raciborskii* to *Daphnia magna*. *Environmental Toxicology*, 19, 453-459.

IP: 1.899

Nogueira I.C.G., Pereira P., Dias, E., **Pflugmacher, S.**, Wiegand ,C., Franca, S., Vasconcelos, V.M. (2004): Accumulation of Paralytic Shellfish Toxins (PST) from the cyanobacterium *Aphanizomenon issatschenkoi* by the Cladocera *Daphnia magna*. *Toxicon* 44, 773-780.

IP: 1.952

Schmidt, K., Steinberg, C.E.W., **Pflugmacher, S.**, Staaks, G.B.O. (2004): Xenobiotic substances such as PCB mixtures (Aroclor 1254) and TBT can influence swimming behavior and biotransformation activity (GST) of carp (*Cyprinus carpio*): *Environmental Toxicology*, 19, 460-470.

IP: 1.556

Timofeyev, M.A., Wiegand, C., Burnison, B.K., Shatilina, Z.M., **Pflugmacher, S.**, Steinberg, C.E.W. (2004): Impact of natural organic matter (NOM) on freshwater amphipods. *The Science of the Total Environment*, 319 (1-3): 115-121.

IP: 2.169

Vogt, R.D., Akkanen, J., Andersen, D.O., Brüggemann, R., Chatterjee, B., Gjessing, E., Kukkonen, J.V.K., Larsen, H.E., Luster, J., Paul, A., **Pflugmacher, S.**, Starr, M., Steinberg, C.E.W., Schmitt-Kopplin, P., Zsolnay, A. (2004): Key site variables governing the functional characteristics of Dissolved Natural Organic Matter (DNOM) in Nordic forested catchments. *Aquatic Sciences* 66 (2): 195-210.

IP: 3.622

Mitrovic, S.M., **Pflugmacher, S.**, James, K.J., Furey, A. (2004): Anatoxin-a elicits an increase in peroxidase and glutathione S-transferase activity in aquatic plants. *Aquatic Toxicology* 68 (2): 185-192.

IP: 2.764

Ballot, A., Krienitz, L., Kotut, K., Wiegand, C., Metcalf, J.S., Codd, G.A., **Pflugmacher, S.** (2004): Cyanobacteria and cyanobacterial toxins in three alkaline Rift Valley lakes of Kenya – Lake Bogoria, Nakuru and Elmenteita. *Journal of Plankton Research*, 26, 925-935.

IP: 1.347

Steinberg, C.E.W., Höss, S., Kloas, W., Lutz, I., Meinelt, T., **Pflugmacher, S.**, Wiegand, C. (2004): Hormonelike effects of humic substances on fish, amphibians, and invertebrates. *Environmental Toxicology*, 19, 409-411.

IP: 1.556

2003

Karlsson, K., Sipii, V., Krause, E., Meriluoto, J., **Pflugmacher, S.** (2003): Mass spectrometric detection and quantification of nodularin-R in flounder livers. *Environmental Toxicology*, 18 (5): 284-288.

IP: 1.343

Greulich, K., **Pflugmacher, S.** (2003): Differences in susceptibility of various life stages of amphibians to pesticide exposure. *Aquatic Toxicology*, 65 (3): 329-336.

IP: 2.142

Lehtonen, K.K., Kankaanpää, H., Leinio, S., Sipiä, V., **Pflugmacher, S.**, Sandberg-Kilpi, E. (2003): Accumulation of nodularin-like compounds from the cyanobacterium *Nodularia spumigena* and changes in acetylcholinesterase activity in the clam *Macoma balthica* during short-term laboratory exposure. *Aquatic Toxicology*, 64 (4): 461-476.

IP: 2.142

Codd, G.A., Metcalf, J.S., Morrison, L.F., Krienitz, L., Ballot, A., **Pflugmacher, S.**, Wiegand, C., Kotut, K. (2003): Susceptibility of flamingos to cyanobacterial toxins via feeding. *Veterinary Record* 152 (23): 722-723.

IP: 1.125

Ballot, A., **Pflugmacher, S.**, Wiegand, C., Kotut, K., Krienitz, L. (2003): Cyanobacterial toxins in Lake Baringo, Kenya. *Limnologia* 33 (1): 2-9.

IP: 0.433

Steinberg, C.E.W., Paul, A., **Pflugmacher, S.**, Meinelt, T., Klöcking, R., Wiegand, C. (2003): Pure humic substances have the potential to act as xenobiotic chemicals - A review *Fresenius Environmental Bulletin* 12 (5): 391-401.

IP: 0.326

Krienitz, L., Ballot, A., Kotut, K., Wiegand, C., Pütz, S., Metcalf, J.S., Codd, G.A., **Pflugmacher, S.** (2003) Contribution of hot spring cyanobacteria to the mysterious deaths of Lesser Flamingos at Lake Bogoria, Kenya. *FEMS Microbiological Ecology* 43 (2): 141-148.

IP: 2.977

Beattie, K.A., Ressler, J., Wiegand, C., Krause, E., Codd, G.A., Steinberg, C.E.W., **Pflugmacher, S.** (2003): Comparative effects and metabolism of two microcystins and nodularin in the brine shrimp *Artemia salina*. *Aquatic Toxicology*, 62 (3): 219-226.

IP: 2.142

2002

Krienitz, L., Ballot, A., Wiegand, C., Kotut, K., Codd, G.A., **Pflugmacher, S.** (2002): Cyanotoxin-producing bloom of *Anabaena flos-aquae*, *Anabaena discoidea* and *Microcystis aeruginosa* (Cyanobacteria) in Nyanza Gulf of Lake Victoria, Kenya. *Journal of Applied Botany – Angewandte Botanik* 76 (5-6): 179-183.

IP: 0.552

Sipiä, V., Kankaanpää, H., **Pflugmacher, S.**, Flinkman, J., Furey, A., James, K.J. (2002): Bioaccumulation and detoxication of nodularin in tissues of flounder (*Platichthys flesus*), mussels (*Mytilus edulis*, *Dreissena polymorpha*), and clams (*Macoma balthica*) from the northern Baltic Sea. *Ecotoxicology & Environmental Safety* 53 (2): 305-311.

IP: 1.381

Best, J.H., **Pflugmacher, S.**, Wiegand, C., Eddy, F.B., Metcalf, J.S., Codd, G.A. (2002): Effects of enteric bacterial and cyanobacterial lipopolysaccharides, and of microcystin-LR, on glutathione S-transferase activities in zebra fish (*Danio rerio*). *Aquatic Toxicology*, 60 (3-4): 223-231.

IP: 2.441

Wiegand, C., Peuthert, A., **Pflugmacher, S.**, Carmeli, S. (2002): Effects of microcin SF608 and microcystin-LR, two cyanobacterial compounds produced by *Microcystis* sp., on aquatic organisms. *Environmental Toxicology*, 17 (4): 400-406.

IP: 0.979

Pflugmacher, S. (2002): Possible allelopathic effects of cyanotoxins, with reference to microcystin-LR, in aquatic ecosystems. *Environmental Toxicology*, 17 (4): 407-413.

IP: 0.979

Greulich, K., Hoque, E., **Pflugmacher, S.** (2002): Uptake, metabolism, and effects on detoxication enzymes of isoproturon in spawn and tadpoles of amphibians. *Ecotoxicology and Environmental Safety* 52 (3): 256-266.

IP: 1.381

Metcalf, J.S., Beattie, K.A., Ressler, J., Gerbersdorf, S., **Pflugmacher, S.**, Codd, G.A. (2002): Cross-reactivity and performance assessment of four microcystin immunoassays with detoxication products of the cyanobacterial toxin, microcystin-LR. *Journal of Water Supply Research and Technology* 51 (3): 145-151.

IP: 0.650

Kamjunke, N., Schmidt, K., **Pflugmacher, S.**, Mehner, T. (2002): Consumption of cyanobacteria by roach (*Rutilus rutilus*): useful or harmful to the fish? *Freshwater Biology* 47 (2): 243-250.

IP: 1.936

Greulich, K., **Pflugmacher, S.** (2002): Untersuchungen zur Wasserqualität eines Reproduktionsgewässers für Amphibien. *Herpetofauna*, 24, 5-9.

IP: -

2001

Pietsch C, Wiegand C, Ame MV, Nicklisch A, Wunderlin D, **Pflugmacher S** (2001) The effects of a cyanobacterial crude extract on different aquatic organisms: Evidence for cyanobacterial toxin modulating factors. *Environmental Toxicology* 16 (6): 535-542.

IP: 1.123

Pflugmacher, S., Tidwell, L.F., Steinberg, C.E.W. (2001): Dissolved humic substances can directly affect freshwater organisms. *Acta Hydrochimica et Hydrobiologica* 29 (1): 34-40.

IP: 0.890

Pflugmacher, S., Wiegand, C., Beattie, K.A., Krause, E., Steinberg, C.E.W., Codd, G.A. (2001): Uptake, effects, and metabolism of cyanobacterial toxins in the emergent reed plant *Phragmites australis* (cav.) trin. ex steud. *Environmental Toxicology and Chemistry* 20 (4): 846-852.

IP: 2.054

Wiegand, C., Krause, E., Steinberg, C.E.W., **Pflugmacher, S.** (2001): Toxicokinetics of atrazine in embryos of the zebrafish (*Danio rerio*). *Ecotoxicology and Environmental Safety*, 49 (3): 199-205.

IP: 1.378

2000

Wiegand, C., **Pflugmacher, S.**, Oberemm, A., Steinberg, C.E.W. (2000): Activity development of selected detoxication enzymes during the ontogenesis of the zebrafish (*Danio rerio*). *International Review on Hydrobiology* 85 (4): 413-422.

IP: 0.441

Metcalf, J.S., Beattie, K.A., **Pflugmacher, S.**, Codd, G.A. (2000): Immuno-crossreactivity and toxicity assessment of conjugation products of the cyanobacterial toxin, microcystin-LR. *FEMS Microbiology Letters* 189 (2): 155-158.

IP: 1.715

Pflugmacher, S., Schwarz, S., Pachur, H.J., Steinberg, C.E.W. (2000): Effects of tributyltin chloride (TBTCCL) on detoxication enzymes in aquatic plants. *Environmental Toxicology* 15 (3): 225-233.

IP: 1.367

Pflugmacher, S., Schröder, P., Sandermann, H. (2000): Taxonomic distribution of plant glutathione S-transferases acting on xenobiotics. *Phytochemistry* 54 (3): 267-273.

IP: 1.125

Wiegand, C., **Pflugmacher, S.**, Giese, M., Frank, H., Steinberg, C.E.W. (2000): Uptake, toxicity, and effects on detoxication enzymes of atrazine and trifluoroacetate in embryos of zebrafish. *Ecotoxicology and Environmental Safety* 45 (2): 122-131.

IP: 1.146

Pflugmacher, S., Spangenberg, M., Steinberg, C.E.W. (2000): Dissolved organic matter (DOM) and effects on the aquatic macrophyte *Ceratophyllum demersum* in relation to photosynthesis, pigmentpattern and activity of detoxication enzymes. *Journal of Applied Botany – Angewandte Botanik* 73 (5-6): 184-190.

IP: 0.552

1999

Pflugmacher, S., Wiencke, C., Sandermann, H. (1999): Activity of phase I and phase II detoxication enzymes in Antarctic and Arctic macroalgae. *Marine Environmental Research* 48 (1): 23-36.

IP: 1.540

Wiegand, C., **Pflugmacher, S.,** Oberemm, A., Meems, N., Beattie, K.A., Steinberg, C.E.W., Codd, G.A. (1999): Uptake and effects of microcystin-LR on detoxication enzymes of early life stages of the zebra fish (*Danio rerio*) *Environmental Toxicology* 14 (1): 89-95.

IP: 1.367

Pflugmacher, S., Codd, G.A., Steinberg, C.E.W. (1999): Effects of the cyanobacterial toxin microcystin-LR on detoxication enzymes in aquatic plants. *Environmental Toxicology*, 14 (1): 111-115.

IP: 1.367

Maier, K.L., Wippermann, U., Leuschel, L., Josten, M., **Pflugmacher, S.,** Schröder, P., Sandermann, H., Takenaka, S., Ziesenis, A., Heyder, J. (1999): Xenobiotic-metabolizing enzymes in the canine respiratory tract. *Inhalation Toxicology* 11 (1): 19-35.

IP: 0.959

Pflugmacher, S., Geissler, K., Steinberg, C.E.W. (1999): Activity of phase I and phase II detoxication enzymes in different cornus parts of *Phragmites australis*. *Ecotoxicology and Environmental Safety* 42 (1): 62-66.

IP: 1.146

1998

Pflugmacher, S., Wiegand, C., Beattie, K.A., Codd, G.A., Steinberg, C.E.W. (1998): Uptake of the cyanobacterial hepatotoxin microcystin-LR by aquatic macrophytes *Journal of Applied Botany – Angewandte Botanik* 72 (5-6): 228-232.

IP: 0.552

Pflugmacher, S., Wiegand, C., Oberemm, A., Beattie, K.A., Krause, E., Codd, G.A., Steinberg, C.E.W. (1998): Identification of an enzymatically formed glutathione conjugate of the cyanobacterial hepatotoxin microcystin-LR: the first step of detoxication *Biochimica et Biophysica Acta – General Subjects* 1425 (3): 527-533.

IP: 2.157

Pflugmacher, S., Sandermann, H. (1998): Taxonomic distribution of plant glucosyltransferases acting on xenobiotics *Phytochemistry* 49 (2): 507-511.

IP: 1.125

Schrenk, C., **Pflugmacher, S.,** Brüggemann, R., Sandermann, H., Steinberg, C.E.W., Kettrup, A. (1998): Glutathione S-transferase activity in aquatic macrophytes with emphasis on habitat dependence *Ecotoxicology and Environmental Safety* 40 (3): 226-233.

IP: 1.146

Pflugmacher, S., Sandermann, H. (1998): Cytochrome P450 monooxygenases for fatty acids and xenobiotics in marine macroalgae. *Plant Physiology* 117 (1): 123-128.

IP: 4.721

1997

Pflugmacher, S., Steinberg, C. (1997): Activity of phase I and phase II detoxication enzymes in aquatic macrophytes. *Journal of Applied Botany – Angewandte Botanik* 71 (5-6): 144-146.

IP: 0.552

before 1997

Schröder, P., **Pflugmacher, S.** and Rennenberg, H. (1992): Biomarker for organic xenobiotics in spruce (*Picea abies* L.) - Dynamics of the detoxification enzyme glutathione S-transferase. *Journal of Applied Botany – Angewandte Botanik*, 66, 5/6.

IP: 0.552

Schröder, P., Berkau, C., Götzberger, C., **Pflugmacher, S.** and Wolf A. (1994): Detoxification of electrophilic xenobiotics in conifers is mediated by glutathione S-transferase. *American Journal of Botany*, 81, 6.

IP: 2.458

Schröder, P., **Pflugmacher, S.** and Götzberger, C. (1994): On the presence and the isozyme pattern of glutathione S-transferase in leaves of aspen (*Populus tremula* L.) and beech (*Fagus sylvatica* L.) -results of a pilot study. *Plant Physiology (Life Sci. Adv.)*, 13, 205-211.

IP: 4.721

Pflugmacher, S. and Schröder P. (1995): Glutathione S-transferases in trees: Inducibility by various organic xenobiotics. *Zeitschrift für Pflanzenernährung und Bodenkunde*, 158, 71-73.

IP: 1.663

Books and Book Chapters

Sandermann, H., Haas, M., Messner, B., **Pflugmacher, S.**, Schröder, P., Wetzell, A. (1997): The Role of Glucosyl and Malonylconjugation in herbicide selectivity. In: *Regulation of Enzymatic systems Detoxifying Xenobiotics in Plants* (Eds. Hatzios, K.K.), NATO, ASI, Kluwer Publishers.

Pflugmacher, S., Sandermann, H. (1998): The use of HASSE diagram technique in biology and ecotoxicology. *Proceedings of the Workshop on "Order Theoretical Tools in Environmental Sciences "*. *Berichte des IGB*, Heft 6, ISSN-Nr. 1432-508X.

Pflugmacher, S. Wiegand, C. (1998): Cyanotoxins - uptake effects and detoxication in aquatic organisms. *Jahresforschungsbericht IGB*, Heft 8, ISSN-Nr. 1432-508

Pflugmacher, S., Schrenk-Bergt, C., Steinberg, C.E.W. (1999): Biomarker. In: *Ökosystemare aquatische Toxikologie*. (Hrsg. C.E.W. Steinberg, S. Pflugmacher, R. Brüggemann, G.-P. Zauke, K. Kümmerer). Ecomed Verlag.

Wiegand, C., **Pflugmacher, S.** (2001): Effects of microcystin-LR on detoxication enzymes. In: *Cyanotoxins - Occurrence, Effects, Controlling Factors*. (Hrsg. I. Chorus)

Wiegand, C., **Pflugmacher, S.** (2001): Uptake of microcystin-LR in aquatic organisms. In: *Cyanotoxins - Occurrence, Effects, Controlling Factors*. (Hrsg. I. Chorus)

Pflugmacher, S., Wiegand, C., Oberemm, A. (2001): Metabolism of microcystin-LR in aquatic organisms. In: *Cyanotoxins - Occurrence, Effects, Controlling Factors*. (Hrsg. I. Chorus)

Pflugmacher, S., Wiegand, C., Steinberg, C.E.W. (2001): Cyanotoxine - Aufnahme, Effekte und Detoxierung in aquatischen Organismen, Kapitel 2.4.1. In: *Ökologie und Schutz von Seen*. Dokulil, M., Hamm, A. & Kohl, J.G. (Hrsg). UTB (Verlag Universität, Wien).

Steinberg, C.E.W., **Pflugmacher, S.**, Wiegand, C., Paul, A., Höss, S., Haitzer, M. (2002): Die vernachlässigte ökologische Regulation in Binnengewässern: Direkte und indirekte Interaktionen von Huminstoffen mit Organismen. In: FRÄNZLE O., MÜLLER F., SCHRÖDER, W. (Hrsg.) *Handbuch der Umweltwissenschaften*. Ecomed, Landsberg.

Pflugmacher, S., Pietsch, C., Rieger, W., Paul, A., Preuer, T., Zwirnmann, E., Steinberg, C.E.W. (2004): Humic substances and their effects on the physiology of aquatic plants. In: *Humic Substances- Nature's most versatile materials*. (Eds.: E. Ghabbour, G. Davis), Taylor & Francis, New York.

Esterhuizen, M. & **Pflugmacher, S.** (2022): The „Green Liver“ concept: Green Liver systems as low-impact development systems using aquatic macrophytes for bioremediation. In: *The Ecotoxicology of Aquatic Macrophytes*. Eds (Mirta Menone & Chris Metcalf), pp 193-2014. Springer. DOI 10.1007/978-3-031-27833-4_8.

Esterhuizen, M., **Pflugmacher, S.** (2020): Microcystins as environmental and human health hazards. COI 10.1016/b78-0-12-818305-2.00037-1.