

## 2019 – Publications

1. AYOUB H, ROQUES-CARMES T., POTIER O., KOUBAISSY B., PONTVIANNE S., LENOUVEL A., GUIGNARD C., MOUSSET E., POIROT H., TOUFAILY J., HAMIEH T. (2019) Comparison of the removal of 21 micropollutants at actual concentration from river water using photocatalysis and photo-Fenton, *SN Applied Science*, 1, 8 UNSP 836
2. CACACEA D., FATTA-KASSINO D., MANAIA C.M., CYTRYN E., KREUZINGER N., RIZZO L., KARAOLIA P., SCHWARTZ T., ALEXANDER J., MERLIN C., GARELICK H., SCHMITT H., DE VRIES D., SCHWERMER C.U., MERIC S., OZKAL C.B., PONS M.N, KNEIS D., BERENDONK T.U. (2019) Antibiotic resistance genes in treated wastewater and in the receiving water bodies: A pan-European survey of urban settings. *Water Research*. 162, 320-330.
3. COLAS F., WOODWARD G., BURDON F.J., GUÉROLD F., CHAUVET E., CORNUT J., CEBRON A., CLIVOT H., DANGER M., DANNER MC., PAGNOUT C., TIEGS SD. (2019) Towards a simple global-standard bioassay for a key ecosystem process: organic-matter decomposition using cotton strips. *Ecological Indicators* 106: 105466.
4. CRENIER C., SANCHEZ-THIRION K., BEC A., PERRIÈRE F. TEN HAGE L. FERRIOL J. FELTEN V., LEFLAIVE. J., DANGER M. (2019) Interactive impacts of silver and phosphorus on autotrophic biofilm elemental and biochemical quality for a macroinvertebrate consumer. *Frontiers in Microbiology*, 10, 732
5. DAUCHY X., BOITEUX V., COLIN A., HÉMARD J., BACH C., ROSIN C., MUNOZ J.F. (2019). Deep seepage of per- and polyfluoroalkyl substances through the soil of a firefighter training site and subsequent groundwater contamination. *Chemosphere*, 214, 729-737.
6. DAUCHY X. (2019) Per- and polyfluoroalkyl substances (PFASs) in drinking water: Current state of the science. *Current Opinion in Environmental Science & Health*, 7, 8-12.
7. FOUR B., THOMAS M., DANGER M., ANGELI N., PERGA M-E, BANAS D. (2019) Influence of fishpond dams on isotopic niche and assimilation of resources by benthic invertebrates in temporary streams. *Hydrobiologia*, 834, 163-181
8. FAUVEL B., CAUCHIE H.M., GANTZER C., OGORZALY L. (2019) Influence of physico-chemical characteristics of sediment on the in situ spatial distribution of F-specific RNA phages in the riverbed. *FEMS Microbiology Ecology* 95, fiy240.
9. GAULLIER C., BARAN N., DOUSSET S., DEVAU N., BILLET D., KITZINGER G, COISY E. Wetland hydrodynamics and mitigation of pesticides and their metabolites at pilot-scale. *Ecological Engineering* 136, 185-192.
10. GOSSELIN, F., MATHIEU L., BLOCK J.-C., CARTERET C., MUHR H., JORAND F.P.A. (2019) Assessment of an anti-scale low-frequency electromagnetic field device on drinking water biofilms, *Biofouling*, 34, 1020-1031
11. GOSSIAUX A., JABIOL J., POUPIN P., CHAUVET E., GUÉROLD F. (2019) Seasonal variations overwhelm temperature effects on microbial processes in headwater streams: insights from a temperate thermal spring. *Aquatic Sciences* 81 , 30
12. HREIZ R., POTIER O., WICKS J., COMMENGE J.M. (2019) CFD Investigation of the effects of bubble aerator layouts on hydrodynamics of an activated sludge channel reactor. *Environmental Technology*, 40, 2657-2670.
13. KOEHLE-DIVO V., PAIN-DEVIN S., BERTRAND C., DEVIN S., MOUNEYRAC C., GIAMBÉRINI L., SOHM B. (2019) *Corbicula fluminea* gene expression modulated by CeO<sub>2</sub> nanomaterials and salinity. *Environmental Science and Pollution Research* 26, 15174–15186.
14. KOEHLE-DIVO V., SOHM B., GIAMBÉRINI L., PAULY D., FLAYAC J., DEVIN S., AUFFAN M., MOUNEYRAC C., PAIN-DEVIN S. (2019) A sub-individual multilevel approach for an integrative assessment of CuO nanoparticle effects on *Corbicula fluminea*. *Environmental Pollution* 254, 112976.

15. LAVIALE M., BEAUSSART A., ALLEN J., QUILÈS F., EL-KIRAT-CHATEL S. (2019) Probing the adhesion of the common freshwater diatom *Nitzschia palea* at the nanoscale. *ACS Applied Materials & Interfaces* 11, 48574–48582
16. LEPESQUEUR J., HOSTACHE R., MARTINEZ-CARRERAS N., MONTARGES-PELLETIER E., HISSLER C. (2019) Sediment transport modelling in riverine environments: on the importance of grain-size distribution, sediment density and boundary conditions – *Hydrology and Earth System Science*, 23, 3901–3915.
17. MATHIEU L., KERAVAL A., DECLERCQ N.F., BLOCK J.-C. (2019) Assessment of a low-frequency ultrasound device on prevention of biofilm formation and carbonate deposition in drinking water systems *Ultrasonic Sonochemistry*, 52, 41-49.
18. MOUSSET E., PUCE M., PONS M.N. (2019) Advanced electro-oxidation with boron-doped diamond for acetaminophen removal from real wastewater in a microfluidic reactor – Kinetics and mass transfer studies. *ChemElectroChem*, 6, 2908-2916.
19. PÉDEN R., POUPIN P., SOHM B., FLAYAC J., GIAMBÉRINI L., KLOPP C., LOUIS F., PAIN-DEVIN S., POTET M., SERRE R.F., DEVIN S. (2019) Environmental transcriptomes of invasive dreissena, a model species in ecotoxicology and invasion biology. *Scientific Data* 6, 234
20. ROBIN M., CHASSAING M., LOUTREUL J., DE ROUGEMONT A., BELLIOU G., MAJOU D., GANTZER C., BOUDAUD N. (2019) Effect of heat treatments and natural ageing on GII.4 Norovirus binding to histo-blood group antigens. *Scientific Reports*, 9, 15312
21. ROUBEAU DUMONT E., LARUE C., LORBER S., GRYTA H., BILLOIR E., GROSS E.M., ELGER A. (2019) Does intraspecific variability matter in ecological risk assessment? Investigation of genotypic variations in three macrophyte species exposed to copper. *Aquatic Toxicology*, 211, 29-37.
22. SANCHEZ-THIRION K., DANGER M., BEC A., BILLOIR E., LABAUDE S., RIGAUD T., BEISEL J.-N., FELTEN V. (2019) High food quality increases *Gammarus pulex* (Crustacea: Amphipoda) infection by the acanthocephalan parasite *Pomphorhynchus laevis*. *International Journal for Parasitology*, 49, 805-817
23. TIEGS S.-D., COSTELLO D.-M., ISKEN M.-W., WOODWARD G., MCINTYRE P.-B., GESSNER M.-O., CHAUVET E., GRIFFITHS N.-A., FLECKER A.-S., ACUNA V., ALBARINO R., ALLEN D.-C., ALONSO C., ANDINO P., ARANGO C., AROVIITA J., BARBOSA M.-V.-M., BARMUTA L.-A., BAXTER C.-V., BELL T.-D.-C., BELLINGER B., BOYERO L., BROWN L.-E., BRUDER A., BRUESEWITZ D.-A., BURDON F.-J., CALLISTO M., CANHOTO C., CAPPS K.-A., CASTILLO M.-M., CLAPCOTT J., COLAS F., COLON-GAUD C., CORNUT J., CRESPO-PEREZ V., CROSS W.-F., CULP J.-M., DANGER M., DANGLES O., DE EYTO E., DERRY A.-M., VILLANUEVA V.-D., DOUGLAS M.-M., ELOSEGI A., ENCALADA A.-C., ENTREKIN S., ESPINOSA R., ETHAIYA D., FERREIRA V., FERRIOL C., FLANAGAN K.-M., FLEITUCH T., SHAH J.-J.-F., FRAINER A., FRIBERG N., FROST P.-C., GARCIA E.-A., LAGO L.-G., SOTO P.-E.-G., GHATE S., GILING D.-P., GILMER A., GONCALVES J.-F., GONZALES R.-K., GRACA M.-A.-S., GRACE M., GROSSART H.-P., GUÉROLD F., et al. (2019) Global patterns and drivers of ecosystem functioning in rivers and riparian zones. *Science Advances* 5 , eaav0486