

Les publications 2020 de la ZAS

Alp M., Le Pichon C. (2020) Getting from sea to nurseries: considering tidal dynamics of juvenile habitat distribution and connectivity in a highly modified estuarine riverscape. *Ecosystems* 1–19. DOI: 10.1007/s10021-020-00536-1

Bacouillard L., Baux N., Dauvin J.C., Desroy N., Geiger K.J., Gentil F., Thiébaud E., (2020) Long-term spatio-temporal changes of the muddy fine sand benthic community of the Bay of Seine (eastern English Channel). *Marine Environmental Research*, 161, 105062. DOI : 10.1016/j.marenvres.2020.105062

Baux N., Chouquet B., Martinez M., Pezy J.P., Raoux A., Balay P., Dancie C., Baffreau A., Dauvin J.C. (2020) The Dredge Disposal Sediment Index (D2SI): A new specific multicriteria index to assess the impact of harbour sediment dumping. *Ecological Indicators*, 112, 106109. DOI: 10.1016/j.ecolind.2020.106109

Billen G. (2020) Agricultural performance over the border line. *Nat Food* 1, 667–668. DOI: 10.1038/s43016-020-00188-3

Billen G., Garnier J., Gossel A., Thieu V., Théry S., Hénault C. (2020) Modeling indirect N₂O emissions along the N cascade from cropland soils to rivers. *Biogeochemistry* 148, 207–221. DOI: 10.1007/s10533-020-00654-x

Blanchoud H., Alliot F., Chen N., Valdes D. (2020) Rapid SPE – LC MS/MS analysis for atrazine, its by-products, simazine and S metolachlor in groundwater samples. *MethodsX*, 7, 100824. DOI : 10.1016/j.mex.2020.100824

Borcier E., Charrier G., Couteau J., Maillet G., Le Grand F., Bideau A., Waeles M., Le Floch S., Amara R., Pichereau V., Laroche J. (2020) An integrated biomarker approach using flounder to improve chemical risk assessments in the heavily polluted Seine estuary. *Journal of Xenobiotics* 10, 14–35. DOI: 10.3390/jox10020004

Day L., Le Bris H., Saulnier E., Pinsivy L., Brind'Amour A. (2020) Benthic prey production index estimated from trawl survey supports the food limitation hypothesis in coastal fish nurseries. *Estuarine, Coastal and Shelf Science*, 235, 106594. DOI: 10.1016/j.ecss.2020.106594

Dendievel A.-M., Mourier B., Coynel A., Evrard O., Labadie P., Ayrault S., Debret M., Koltalo F., Copard Y., Faivre Q., Gardes T., Vauclin S., Budzinski H., Grosbois C., Winiarski T., Desmet M. (2020) Spatio-temporal assessment of the polychlorinated biphenyl (PCB) sediment contamination in four major French river corridors (1945–2018). *Earth System Science Data*, 12, 1153–1170. DOI: 10.5194/essd-12-1153-2020

Desmau M., Carboni A., Le Bars M., Doelsch E., Benedetti M.F., Auffan M., Levard C., Gelibert A. (2020) How microbial biofilms control the environmental fate of engineered nanoparticles? *Front. Environ. Sci.* 8, 82. DOI: 10.3389/fenvs.2020.00082

Dris R., Tramoy R., Alligant S., Gasperi J., Tassin B. (2020) Plastic debris flowing from rivers to oceans: the role of the estuaries as a complex and poorly understood key interface, in: Rocha-Santos, T., Costa, M., Mouneyrac, C. (Eds.), *Handbook of Microplastics in the Environment*. Springer International Publishing, Cham, pp. 1–28. DOI: 10.1007/978-3-030-10618-8_3-1

- Froger C., Quantin C., Bordier L., Monvoisin G., Evrard O., Ayrault S. (2020) Quantification of spatial and temporal variations in trace element fluxes originating from urban areas at the catchment scale. *J Soils Sediments* 20, 4055–4069. DOI: 10.1007/s11368-020-02766-1
- Gilet L., Gob F., Gautier E., Houbrechts G., Virmoux C., Thommeret N. (2020) Hydro-morphometric parameters controlling travel distance of pebbles and cobbles in three gravel bed streams. *Geomorphology*, 358, 107117. DOI : 10.1016/j.geomorph.2020.107117
- Goutte A., Alliot F., Budzinski H., Simonnet-Laprade C., Santos R., Lachaux V., Maciejewski K., Le Menach K., Labadie P. (2020) Trophic transfer of micropollutants and their metabolites in an urban riverine food web. *Environ. Sci. Technol.* 54, 8043–8050. DOI : 10.1021/acs.est.0c01411
- Goutte A., Molbert N., Guérin S., Richoux R., Rocher V. (2020) Monitoring freshwater fish communities in large rivers using environmental DNA metabarcoding and a long-term electrofishing survey. *Journal of Fish Biology* 97, 444–452. DOI: 10.1111/jfb.14383
- Guillossou R., Le Roux J., Brosillon S., Mailler R., Vulliet E., Morlay C., Nauleau F., Rocher V., Gasperi J. (2020) Benefits of ozonation before activated carbon adsorption for the removal of organic micropollutants from wastewater effluents. *Chemosphere* 245, 125530. DOI :10.1016/j.chemosphere.2019.125530
- Guillossou R., Le Roux J., Mailler R., Morlay C., Vulliet E., Nauleau F., Rocher V., Gasperi J. (2020) Influence of the properties of 7 micro-grain activated carbons on organic micropollutants removal from wastewater effluent. *Chemosphere* 243, 125306. DOI : 10.1016/j.chemosphere.2019.125306
- Guillossou R., Le Roux J., Mailler R., Pereira-Derome C.S., Varrault G., Bressy A., Vulliet E., Morlay C., Nauleau F., Rocher V. (2020) Influence of dissolved organic matter on the removal of 12 organic micropollutants from wastewater effluent by powdered activated carbon adsorption. *Water Research*, 172, 115487. DOI: 10.1016/j.watres.2020.115487
- Igos E., Mailler R., Guillossou R., Rocher V., Gasperi J. (2021) Life cycle assessment of powder and micro-grain activated carbon in a fluidized bed to remove micropollutants from wastewater and their comparison with ozonation. *Journal of Cleaner Production* 287, 125067. DOI: 10.1016/j.jclepro.2020.125067
- Kanso T., Gromaire M.-C., Ramier D., Dubois P., Chebbo G. (2020) An Investigation of the accuracy of EC5 and 5TE capacitance sensors for soil moisture monitoring in urban soils-laboratory and field calibration. *Sensors* 20, 6510. DOI: 10.3390/s20226510
- Kazour M., Amara R. (2020) Is blue mussel caging an efficient method for monitoring environmental microplastics pollution? *Science of The Total Environment*, 710, 135649. DOI: 10.1016/j.scitotenv.2019.135649
- Le Noë J., Roux N., Billen G., Gingrich S., Erb K.-H., Krausmann F., Thieu V., Silvestre M., Garnier J. (2020) The phosphorus legacy offers opportunities for agro-ecological transition (France 1850–2075). *Environ. Res. Lett.* 15, 064022. DOI : 10.1088/1748-9326/ab82cc
- Le Pichon C., Lestel L., Courson E., Merg M.-L., Tales E., Belliard J. (2020) Historical changes in the ecological connectivity of the Seine River for fish: a focus on physical and chemical barriers since the mid-19th century. *Water* 12, 1352. DOI: 10.3390/w12051352

Marescaux A., Thieu V., Gypens N., Silvestre M., Garnier J. (2020) Modeling inorganic carbon dynamics in the Seine River continuum in France. *Hydrology and Earth System Sciences* 24, 2379–2398. DOI: 10.5194/hess-24-2379-2020

Mengual B., Hir P.L., Rivier A., Caillaud M., Grasso F. (2020) Numerical modeling of bedload and suspended load contributions to morphological evolution of the Seine Estuary (France). *International Journal of Sediment Research*, (sous presse) DOI: 10.1016/j.ijsrc.2020.07.003

Molbert N., Alliot F., Leroux-Coyau M., Médoc V., Biard C., Meylan S., Jacquin L., Santos R., Goutte A. (2020) Potential benefits of acanthocephalan parasites for chub hosts in polluted environments. *Environ. Sci. Technol.* 54, 5540–5549. DOI : 10.1021/acs.est.0c00177

Paijens C., Bressy A., Bethouart F., Briand C., Caupos É., Frère B., Mailler R., Neveu P., Rocher V., Saad M., Moilleron R. (2020) Biocide concentrations in the dissolved and particulate fractions of urban waters in the Paris conurbation (France, 2018-2019). LEESU, LCPP, Mairie de Paris, SIAAP. DOI : 10.1594/PANGAEA.910472

Paijens C., Bressy A., Frère B., Moilleron R. (2020) Biocide emissions from building materials during wet weather: identification of substances, mechanism of release and transfer to the aquatic environment. *Environ Sci Pollut Res* 27, 3768–3791. DOI : 10.1007/s11356-019-06608-7

Paijens C., Frère B., Caupos E., Moilleron R., Bressy A. (2020) Determination of 18 biocides in both the dissolved and particulate fractions of urban and surface waters by HPLC-MS/MS. *Water Air Soil Pollut* 231, 210. DOI: 10.1007/s11270-020-04546-6

Peeters A., Houbrechts G., Hallot E., Van Campenhout J., Gob F., Petit F. (2020) Can coarse bedload pass through weirs? *Geomorphology* 359, 107131. DOI: 10.1016/j.geomorph.2020.107131

Puech T., Schott C., Mignolet C. (2020) Characterising the diversity and spatial differentiation of crop managements at a regional scale. *European Journal of Agronomy* 120, 126112. DOI: 10.1016/j.eja.2020.126112

Sage J., Berthier E., Gromaire M.-C. (2020) Modeling Soil moisture redistribution and infiltration dynamics in urban drainage systems. *J. Hydrol. Eng.* 25, 04020041. DOI: 10.1061/(ASCE)HE.1943-5584.0001978

Saulnier E., Bris H.L., Tableau A., Dauvin J.C., Brind'Amour A. (2020) Food limitation of juvenile marine fish in a coastal and estuarine nursery. *Estuarine, Coastal and Shelf Science* 241, 106670. DOI: 10.1016/j.ecss.2020.106670

Tramoy R., Gasperi J., Colasse L., Silvestre M., Dubois P., Noûs C., Tassin B. (2020) Transfer dynamics of macroplastics in estuaries – New insights from the Seine estuary: Part 2. Short-term dynamics based on GPS-trackers. *Marine Pollution Bulletin* 160, 111566. DOI : 10.1016/j.marpolbul.2020.111566

Treilles R., Cayla A., Gaspéri J., Strich B., Ausset P., Tassin B. (2020) Impacts of organic matter digestion protocols on synthetic, artificial and natural raw fibers. *Science of The Total Environment* 748, 141230. DOI: 10.1016/j.scitotenv.2020.141230

Wang J.-L., Alasonati E., Tharaud M., Gelabert A., Fisticaro P., Benedetti M.F. (2020) Flow and fate of silver nanoparticles in small French catchments under different land-uses: The first one-year study. *Water Research* 176, 115722. DOI: 10.1016/j.watres.2020.115722