

2022 – Publications

1. ADNAN F.H., PONS M.N., MOUSSET E. (2022) Thin film microfluidic reactors in electrochemical advanced oxidation processes for wastewater treatment: A review on influencing parameters, scaling issues and engineering considerations, *Electrochemical Science Advances*, e2100210. DOI: 10.1002/elsa.202100210
2. ADNAN F.H., PONTVIANNE S., PONS M.N., MOUSSET E. Roles of H₂ evolution overpotential, materials porosity and cathode potential on mineral electro-precipitation in microfluidic reactor – New criterion to predict and assess interdependency, *Electrochimica Acta*, 428, 140926. DOI: 10.1016/j.electacta.2022.140926.
3. AMIRI, T., ABILDTRUP, J., GARCIA, S. MONTAGNE-HUCK, C. (2022) The impact of water protection measures in the Vittel impluvium on recreational values: a choice experiment with local residents. *Revue Française d'Economie*, 37 (2) 145-204. DOI : 10.3917/rfe.222.0145
4. AMOUSSOU N., LECOCQ T., FOURRIER C., NIVELLE R., FLECK C., FONTAINE P., PASQUET A., THOMAS M. (2022) A multi-trait evaluation framework to assess the consequences of polyculture in fish production: An application for pikeperch in recirculated aquaculture systems. *Aquaculture Reports*, 27: 101349. DOI: 10.1016/j.aqrep.2022.101349
5. AMOUSSOU N., THOMAS M., PASQUET A., LECOCQ T. (2022) Finding the best match: a ranking procedure of fish species combinations for polyculture development. *Life*, 12(9), 1315. DOI: 10.3390/life12091315.
6. BARRETEAU O., CHARPENTIER I., BLANCHOUD H., BONNEFOND M., GOUY V., PISCART C., PONS M.N., RAIMONET M., ROYER A., SALVADOR-BLANE S. (2022) Exp'Eau, un jeu sérieux pour explorer les trajectoires d'amélioration de la qualité de l'eau dans les bassins versants ruraux. *Dynamiques environnementales*, 49-50, 27-53. DOI : 10.4000/dynenviron.7208.
7. BECK M., BILLOIR E., FELTEN V., MEYER A., USSEGLIO-POLATERA P., DANGER M. (2022) A database of West European headwater macroinvertebrate stoichiometric traits. *Global Ecology and Biogeography*, 31(1): 4-9. DOI: 10.1111/geb.13413
8. BUTRUILLE G., THOMAS M., PASQUET A., AMOUSSOU N., TOOMEY L., ROSENSTEIN A., CHAUCHARD S., LECOCQ T. (2022) AquaDesign: A tool to assist aquaculture production design based on abiotic requirements of animal species. *PLoS ONE* 17(8): e0272508. DOI: 10.1371/journal.pone.0272508.
9. CHAQROUN A., HARTARD C., JOSSE T., TAVERNIERS A., JEULIN H., GANTZER C., MURRAY J.M., Obepine Consortium, BERTRAND I., SCHVOERE E. (2022) SARS-CoV-2 variability in patients and wastewaters - potential immuno-modulation during the shift from Delta to Omicron. *Biomedicines*, 10(9):2080. DOI: 10.3390/biomedicines10092080.
10. CLESSE M., LEGOUT A., RANGER J., ZELLER B., VAN DER HEIJDEN G. (2022) Soil chemical fertility change over four decades in the Morvan Mountains and influence of tree species (Burgundy, France). *Forest Ecosystems*, 9: 100043. DOI: 10.1016/j.fecs.2022.100043.
11. GUILLOTEAU H, PRADALIER C, ROMAN V, BELLANGER X, BILLARD P, MERLIN C. (2022) Identification of antibiotics triggering the dissemination of antibiotic resistance genes by SXT/R391 elements using a dedicated high-throughput whole-cell biosensor assay. *Journal of Antimicrobial Chemotherapy*, 77(1) 112–123. DOI: 10.1093/jac/dkab374.
12. LACHAUX N., CATROUILLET C., MARSAC R., POIRIER L., PAIN-DEVIN S., et al. (2022) Implications of speciation on rare earth element toxicity: A focus on organic matter influence in *Daphnia magna* standard test. *Environmental Pollutions*, 307:119554. DOI: 10.1016/j.envpol.2022.119554
13. LE MEUR M., MONTARGES-PELLETIER E., GLEY R., BRIOIS V., MICHOT L., KANBAR H., CAILLET C., RAZAFITIANAMAHARAVO A., VILLIERAS F. (2022) Natural suspended particulate matter (SPM) versus lab-controlled particles: Comparison of the reactivity and association mode of Zn. *Applied Geochemistry*, 140: 105286. DOI: 10.1016/j.apgeochem.2022.105286.

14. MAURICE N., ADOUANI N., POCHET C., PONS M.N. (2022) Role of seasons in the fate of dissolved organic carbon and nutrients in a large-scale surface flow constructed wetland. *Water*, 14, 1474. DOI: 10.3390/w14091474.
15. POLST B.H., HILT S., STIBOR H., HÖLKER F., ALLEN J., VIJAYARAJ V., KIPFERLER N., LEFLAIVE J., GROSS E.M., SCHMITT-JANSEN M. (2022) Warming lowers critical thresholds for multiple stressor-induced shifts between aquatic primary producers. *Science of the Total Environment*, 838(4), 156511. DOI: 10.1016/j.scitotenv.2022.156511.
16. SLABY S., LE COR F., DUFOUR V., AUGER L., PASQUINI L., CARDOSO O., CURTET L., BAUDOUIN J. M., WIEST L., VULLIET E., FEIDT C., DAUCHY X., BANAS D. (2022) Distribution of pesticides and some of their transformation products in a small lentic waterbody: Fish, water, and sediment contamination in an agricultural watershed. *Environmental Pollution*, 292 B, 118403. DOI: 10.1016/j.envpol.2021.118403.
17. THOMAS M., AMOUSSOU N., EL MANFALOTI M., FLECK C., LEDORE Y. PASQUET A., LECOCQ T. (2022) All species matter: Comprehensive analysis of polyculture consequences on pikeperch (*Sander lucioperca*), sterlet (*Acipenser ruthenus*) and tench (*Tinca tinca*) in recirculated aquaculture system. *Aquaculture*, 559, 738438 . DOI: 10.1016/j.aquaculture.2022.738438.
18. THOMAS M., REYNAUD J.G., LEDORE Y., PASQUET A., LECOCQ (2022) Enrichment in a fish polyculture: does it affect fish behaviour and development of only one species or both? *Applied Sciences*, 12(7), 3674. DOI: 10.3390/app12073674.
19. VENKATARAMANAN, A. FAURE-GIOVAGNOLI P., REGAN C., HEUDRE D., FIGUS C., USSEGLIO-POLATERA P., PRADALIER C., LAVIALE M. (2022) Usefulness of synthetic datasets for diatom automatic detection using a deep-learning approach, *Engineering Applications of Artificial Intelligence*, 117 B, 105594. DOI: 10.1016/j.engappai.2022.105594.
20. VIJAYARAJ V., KIPFERLER N., STIBOR H., ALLEN J., HÖLKER F., LAVIALE M., LEFLAIVE J., LÓPEZ MOREIRA MAZACOTTE G. A., POLST B. H., SCHMITT-JANSEN M., HILT S., GROSS E. M. (2022) Evaluating multiple stressor effects on benthic-pelagic freshwater communities in systems of different complexities: challenges in upscaling, *Water*, 14(4), 581. DOI: 10.3390/w14040581.
21. VIJAYARAJ V., LAVIALE M., ALLEN J., AMOUSSOU N., HILT S., HÖLKER F., KIPFERLER N., LEFLAIVE J., LÓPEZ MOREIRA M G., POLST B., SCHMITT-JANSEN M., STIBOR H., GROSS E. (2022) Multiple-stressor exposure of aquatic food webs: Nitrate and warming modulate the effect of pesticides. *Water Research*, 216, 118325 . DOI: 10.1016/j.watres.2022.118325.