

Publications

1. Revues internationales

Leboucher T., Bacon J., Chauvin C., Billoir E., Pierre M., Fulcrand A., Bourillon B., **Usseglio-Polatera P.** 2025. How macrophytes can improve the ecological assessment of rivers in a multiple-pressure context: development of a new diagnostic tool. *Water Research*, 286, 124173. <https://doi.org/10.1016/j.watres.2025.124173>

Chéron S., Felten V., Venkataramanan A., Wetzel C.E., Heudre D., Pradalier C., **Usseglio-Polatera P.**, Devin S., Laviale M. 2025. Comparative effects of glyphosate and AMPA on the growth and morphology of common freshwater benthic diatoms. *Heliyon*, 11, e43680. <https://doi.org/10.1016/j.heliyon.2025.e43680>

Meyer A., Billoir E., Archaimbault V., Mondy C.P., **Usseglio-Polatera P.** 2025. Individual and combined effects of design and inter-operator variability on stream ecological assessment. *Science of the Total Environment*, 974, 179218. <https://doi.org/10.1016/j.scitotenv.2025.179218>

Beck M., Billoir E., **Usseglio-Polatera P.**, Meyer A., Gautreau E., Danger M. 2024. Effects of water nutrient concentrations on stream macroinvertebrate community stoichiometry: a large-scale study. *PCI Ecology*, 4, e69. <https://doi.org/10.24072/pcjournal.441>

Kunz S., Kefford B.J., **Usseglio-Polatera P.**, Hawkins C.P., Poff N.L., Akawagwuna F., Odume N., Schmidt-Kloiber A., Graf W., Metzeling L., Matthaei C.D., Phillips N., Schäfer R. 2024. Similarity of stream insect trait profiles across biogeographic regions. *Diversity & Distributions*, 30, e13812. <https://doi.org/10.1111/ddi.13812>

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Beck M., Billoir E., Flourey M., **Usseglio-Polatera P.** & Danger M. 2023. A 34-year survey under phosphorous decline and warming: Consequences on stoichiometry and functional trait composition of freshwater macroinvertebrate communities. *Science of the Total Environment*, 858, 159786. <http://dx.doi.org/10.1016/j.scitotenv.2022.159786>

Venkataramanan A., Faure-Giovagnoli P., Regan C., Heudre D., Figus C., **Usseglio-Polatera P.**, Pradalier C. & Laviale M. 2023. Usefulness of synthetic datasets for diatom automatic detection using a deep-learning approach. *Engineering Applications: Artificial Intelligence*, 117, 105594. <https://doi.org/10.1016/j.engappai.2022.105594>

Beck M., Billoir E., Felten V., Meyer A., **Usseglio-Polatera P.** & Danger M. 2022. Lessons from linking bio- and ecological traits to stoichiometric traits in stream macroinvertebrates. *Ecology and Evolution*, 12, e9605. <https://doi.org/10.1002/ece3.9605>

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