

Les publications 2019 de la ZABR

Angulo-Jaramillo R., Bagarello V., Di Prima S., Gosset A., Iovino M., Lassabatere L. (2019) Beerkan Estimation of Soil Transfer parameters (BEST) across soils and scales. *Journal of Hydrology*, 576, 239-261. DOI: 10.1016/j.jhydrol.2019.06.007

Anneville O., Chang C. W., Dur G., Souissi S., Rimet F., Hsieh C.H. (2019) The paradox of re-oligotrophication: the role of bottom-up versus top-down controls on the phytoplankton community. *Oikos*, 128, 1666-1677. DOI: 10.1111/oik.06399

Babut M., Mourier B., Desmet M., Simonnet-Laprade C., Labadie P., Budzinski H., De Alencastro L.F., Tu T.A., Strady E., Gratiot N. (2019) Where has the pollution gone ? A survey of organic contaminants in Ho Chi Minh City / Saigon River (Vietnam) bed sediments. *Chemosphere*, 217, 261-269. DOI: 10.1016/j.chemosphere.2018.11.008

Bouarafa S., Lassabatère L., Lipeme-Kouyi G., Angulo-Jaramillo R. (2019) Hydrodynamic Characterization of Sustainable Urban Drainage Systems (SuDS) by Using Beerkan Infiltration Experiments. *Water*, 11(4), 660. DOI: <https://doi.org/10.3390/w11040660>

Bourgois et al. (2019) Modelacion de la decianuracion con H₂O₂ de aguas residuales en la industria de recubrimientos metalicos. *Journal CIM, Science Technology and Educational Research*, 7, 1231-1238.

Bretier M., Dabrin A., Bessueille-Barbier F., Coquery M. (2019) The impact of dam flushing event on dissolved trace elements concentrations: coupling integrative passive sampling and discrete monitoring. *Science of The Total Environment*, 656, 433-446. DOI: 10.1016/j.scitotenv.2018.11.303

Camenen B., Naudet G., Dramais G., Le Coz J. Paquiera A. (2019) A multi-technique approach for evaluating sand dynamics in a complex engineered piedmont river system. *Science of The Total Environment*, 657, 485-497. DOI: 10.1016/j.scitotenv.2018.11.394

Cauvy-Frauni S., Trenkel V., Daufresne M., Maire A., Capra H., Olivier J.-M., Lobry J., Cazelles B., Lamouroux N. (2019) Interpretation of interannual variability in long-term aquatic ecological surveys. *Canadian Journal of Fisheries and Aquatic Sciences*, 77(5). DOI: 10.1139/cjfas-2019-0146

Chapuis H., Ré-Bahuau J., Jolivet J., Paran F., Graillot D. (2019) Karst river interaction, elaboration of an indicator of the karst hydrological conditions applied to the Ceze river (Gard, France). In: Bertrand C., Denimal S., Steinmann M., Renard P. (eds) Eurokarst 2018, Besançon. Advances in Karst Science. Springer, Cham. 77-81. DOI: 10.1007/978-3-030-14015-1_9

Chonova T., Kurmayer R., Rimet F., Labanowski J., Vasselon V., Keck F., Illmer P., Bouchez A. (2019) Benthic diatom communities in an alpine river impacted by waste water treatment effluents as revealed using DNA metabarcoding. *Frontiers in Microbiology*, 10. 653 DOI: 10.3389/fmicb.2019.00653

Claret C., Marmonier P. (2019) Relative effects of elevational and habitat constraints on alpine spring biodiversity. *International Journal of Limnology*, 55, 20. DOI: 10.1051/limn/2019021

Comby E., Le Lay Y.-F., Piégay H. (2019) Power and changing riverscapes: the socio-ecological fix and newspaper discourse on the Rhône River (France) since 1945. *Annals of the American Association of Geographers*, 109, 1671-1690. DOI: 10.1080/24694452.2019.1580134

Cornacchia L., Licci S., Nepf H., Folkard A., van der Wal D., van de Koppel, J., Puijalon, S., Bouma, T.J. (2019) Turbulence-mediated facilitation of resource uptake in patchy stream macrophytes. *Limnology and Oceanography*, 64, 714-727. DOI: 10.1002/lno.11070

Cornacchia L., Folkard A., Davies G., Grabowski R., van de Koppel J., van der Wal D., Wharton G., Puijalon S., Bouma, T.J. (2019) Plants face the flow in V-formation: a study of plant patch alignment in streams. *Limnology and Oceanography*, 64, 1087–1102. DOI: <https://doi.org/10.1002/lno.11099>

Cornacchia L., Van der Wal D., Van de Koppel J., Puijalon S., Wharton G., Bouma T.J. (2019) Flow-divergence feedbacks control propagule retention by in-stream vegetation: the importance of spatial patterns for facilitation. *Aquatic Sciences*, 81, 17. DOI: 10.1007/s00027-018-0612-1

Dépret T., Piégay H., Dugué V., Vaudor L., Faure J.-B., Le Coz J., Camenen B. (2019) Estimating and restoring bedload transport through a run-of-river reservoir. *Science of The Total Environment*, 654, 1146-1157. DOI: 10.1016/j.scitotenv.2018.11.177

Di Prima S., Castellini M., Abou Najm M.R., Stewart R.D., Angulo-Jaramillo R., Winiarski T., Lassabatère L. (2019) Experimental assessment of a new comprehensive model for single ring infiltration data. *Journal of Hydrology*, 579, 937-951. DOI: 10.1016/j.jhydrol.2019.03.077

Dole-Olivier M.J., Wawzyniak V., Creuzé des Châtelliers M., Marmonier P. (2019) Do thermal infrared (TIR) remote sensing and direct hyporheic measurements (DHM) similarly detect river-groundwater exchanges? Study along a 40 km-section of the Ain River (France). *Science of the Total Environment*, 646, 1097-1110. DOI: 10.1016/j.scitotenv.2018.07.294

Evin E., Wilhelm B., Jenny J.P. (2019) Flood hazard assessment of the Rhône River revisited with reconstructed discharges from lake sediments. *Global and Planetary Change*, 172, 114-123. DOI: 10.1016/j.gloplacha.2018.09.010

Galland W., Piola F., Burlet A., Mathieu C., Nardy M., Poussineau S., Blazère, L., Gervaix J., Puijalon S., Simon L., Haichar F.E.Z. (2019) Biological denitrification inhibition (BDI) in the field: A strategy to improve plant nutrition and growth. *Soil Biology and Biochemistry*, 136, 1-9. DOI: 10.1016/j.soilbio.2019.06.009

Gosset A., Oestreicher V., Perullini M., Bilmes S.A., Jobbagy M., Dulhoste S., Bayard R., Durrieu C. (2019) Optimization of sensors based on encapsulated algae for pesticide detection in water. *Analytical methods*, 11, 6193-6203. DOI: 10.1039/C9AY02145K

Gosset A., Durrieu C., Barbe P., Bazin C., Bayard R. (2019) Microalgal whole-cell biomarkers as sensitive tools for fast toxicity and pollution monitoring of urban wet weather discharges. *Chemosphere*, 217, 522-533. DOI: 10.1016/j.chemosphere.2018.11.033

Guillon S., Thorel M., Flipo N., Oursel B., Claret C., Fayolle S., Bertrand C., Rapple B., Piegay H., Olivier J.-M., Vienney A., Marmonier P., Franquet E. (2019) Functional classification of artificial alluvial ponds driven by connectivity with the river : Consequences for restoration. *Ecological Engineering*, 127, 394-403. DOI: 10.1016/j.ecoleng.2018.12.018

Janssen P., Piégay H., Pont B., Evette A. (2019) How maintenance and restoration measures mediate the response of riparian plant functional composition to environmental gradients on channel margins: Insights from a highly degraded large river. *Science of The Total Environment*, 656, 1312-1325. DOI: 10.1016/j.scitotenv.2018.11.434

Lamberti-Raverot B., Piola F., Vallier F., Gardette, V., Puijalon, S. (2019) Achene traits involved in the water dispersal of the invasive *Fallopia × bohemica* complex: Variability and dispersal strategies. *Flora*, 251, 88-94. DOI: 10.1016/j.flora.2019.01.002

Lassabatère L., Di Prima S., Angulo-Jaramillo R., Keesstra S., Salesa D. (2019) Beerkan multi-runs for characterizing water infiltration and spatial variability of soil hydraulic properties across scales. *Hydrological Sciences Journal*, 64, 165-178. DOI: 10.1080/02626667.2018.1560448

Launay M., Dugué V., Faure J.-B., Coquery M., Camenen B., Le Coz J. (2019) Numerical modelling of the suspended particulate matter dynamics in a regulated river network. *Science of The Total Environment*, 665, 591-605. DOI: 10.1016/j.scitotenv.2019.02.015

Lécrivain N., Frossard V., Naffrechoux E., Clément B. (2019) Looking at organic pollutants (ops) signatures in littoral sediments to assess the influence of a local urban source at the whole lake scale. *Polycyclic Aromatic Compounds*, DOI: 10.1080/10406638.2019.1631195

Lécrivain N., Frossard V., Clément B. (2019) Changes in mobility of trace metals at the sediment-water-biota interfaces following laboratory drying and reimmersion of a lacustrine sediment. *Environmental Science and Pollution Research*, 26, 14050-14058. DOI: 10.1007/s11356-019-04729-7

Lécrivain N., Frossard V., Clément B. (2019) Contribution of trace metallic elements to weakly contaminated lacustrine sediments: effects on benthic and pelagic organisms through multi-species laboratory bioassays. *Ecotoxicology*, 28, 154-166. DOI: 10.1007/s10646-018-2008-3

Lepage H., Masson M., Delanghe D., Le Bescond C. (2019) Grain size analyzers: results of an intercomparison study. *SN Applied Sciences*. 1, 1100; DOI: 10.1007/s42452-019-1133-9

Liber Y., Mourier B., Marchand P., Bichon E., Perrodin Y., Bedell J.-P. (2019) Past and recent state of sediment contamination by persistent organic pollutants (POPs) in the Rhône River: Overview of ecotoxicological implications. *Science of the Total Environment*, 646, 1037-1046. DOI: 10.1016/j.scitotenv.2018.07.340

Licci S., Nepf H., Delolme C., Marmonier P., Bouma T.J., Puijalon S. (2019) The role of patch size in ecosystem engineering capacity: a case study of aquatic vegetation. *Aquatic Sciences*, 81, 41. DOI: 10.1007/s00027-019-0635-2

Marmonier P., Olivier M.-J., Creuzé des Châtelliers M., Paran F., Graillot D., Winiarski T., Konecny-Dupré L., Navel S., Cadilhac L. (2019) Does spatial heterogeneity of hyporheic fauna vary similarly with natural and artificial changes in braided river width? *Science of the Total Environment*, 689, 57-69. DOI: 10.1016/j.scitotenv.2019.06.352

Marmonier P., Dole-Olivier M.J., Creuzé Des Châtelliers M., Chapuis H., Ré-Bahuaud J., Johannet A., Cadilhac L. (2019) Contribution of the surface water – groundwater interfaces to river biodiversity: example of a Mediterranean river, the Cèze River. *Physio-Géo – Géographie Physique et Environnement*, 13, 75-90. DOI: 10.4000/physio-geo.7718

Masset T., Frossard V., Perga M.E., Cottin N., Piot C., Cachera S., Naffrechoux E. (2019) Trophic position and individual feeding habits as drivers of differential PCB bioaccumulation in fish populations. *Science of the Total Environment*, 674, 472-481. DOI: 10.1016/j.scitotenv.2019.04.196

Masset T., Cottin N., Piot C., Fanget P., Naffrechoux E. (2019) PCB mass budget in a perialpine lake undergoing natural decontamination in a context of global change. *Science of the Total Environment*, 693, 133590. DOI: 10.1016/j.scitotenv.2019.133590

Mermilliod-Blondin F., Voisin J., Marjolet L., Marmonier P., Cournoyer B. (2019) Clay beads as artificial trapping matrices for monitoring bacterial distribution among urban stormwater infiltration systems and their connected aquifers. *Environmental Monitoring and Assessment*, 191, 58. DOI: 10.1007/s10661-019-7190-0

Misset C., Recking A., Legout C., Valsangkar N., Bodereau N., Zanker S., Poirel A., Borgniet L. (2019) The dynamics of suspended sediment in a typical alpine alluvial river reach: insight from a seasonal survey. *Water Resources Research*, 55(12), 10918-10934. DOI: 10.1029/2019WR025222

Misset C., Recking A., Navratil O., Legout C., Poirel A., Cazilhac M., Briguet V., Esteves M. (2019) Quantifying bed-related suspended load in gravel bed rivers through an analysis of the bedload-suspended load relationship. *Earth Surface Processes and Landforms*, 44(9) 1722-1733. DOI: 10.1002/esp.4606

Misset C., Recking A., Legout C., Poirel A., Cazilhac M., Esteves M., Bertrand M. (2019) An attempt to link suspended load hysteresis patterns and sediment sources configuration in alpine catchments. *Journal of Hydrology*, 576, 72-84. DOI: 10.1016/j.jhydrol.2019.06.039

Mouget A., Goulon C., Axenrot T., Balk H., Lebourges-Dhaussy A., Godlewska M., Guillard, J. (2019) Including 38 kHz in the standardization protocol for hydroacoustic fish surveys in temperate lakes. *Remote Sensing in Ecology and Conservation*, 5, 332-345. DOI: 10.1002/rse2.112

Mourier B., Labadie P., Desmet M., Grosbois C., Raux J., Debret M., Copard Y., Pardon P., Budzinski H., Babut M. (2019) Combined spatial and retrospective analysis of fluoroalkyl chemicals in fluvial sediments reveal changes in levels and patterns over the last 40 years. *Environmental Pollution*, 253, 1117-1125. DOI: 10.1016/j.envpol.2019.07.079

Nouchi V., Kutser T., Wüest A. (2019) Resolving biogeochemical processes in lakes using remote sensing. *Aquatic sciences*, 81, 27. DOI: 10.1007/s00027-019-0626-3

Paix B., Ezzedine J.A., Jacquet S. (2019) Diversity, dynamics, and distribution of *Bdellovibrio* and like organisms in perialpine lakes. *Applied and Environmental Microbiology*, 85 (6) e02494-18. DOI: 10.1128/AEM.02494-18

Pinasseau L., Wiest L., Fildier A., Volatier L., Fones G.R., Mills G.A., Mermilliod-Blondin F., Vulliet E. (2019) Use of passive sampling and high resolution mass spectrometry using a suspect screening approach to characterise emerging pollutants in contaminated groundwater and runoff. *Science of the Total Environment*, 672, 253-263. DOI: 10.1016/j.scitotenv.2019.03.489

Piton G., Carladous S., Recking A., Tacnet J.-M., Liébault F., Kuss D., Quefféléan Y., Marco O. (2019) Fonctions des barrages de correction torrentielle. *Cybergeo : European Journal of Geography*, 896. DOI : 10.4000/cybergeo.32190

Poulier G., Launay M., Le Bescond C., Thollet F., Coquery M., Le Coz J. (2019) Combining flux monitoring and data reconstruction to establish annual budgets of suspended particulate matter,

mercury and PCB in the Rhône River from Lake Geneva to the Mediterranean Sea. *Science of The Total Environment*, 658, 457-473. DOI: 10.1016/j.scitotenv.2018.12.075

Rimet F., Feret L., Bouchez A., Dorioz J.M., Dambrine E. (2019) Factors influencing the heterogeneity of benthic diatom communities along the shoreline of natural alpine lakes. *Hydrobiologia*, 839, 103-118. DOI: 10.1007/s10750-019-03999-z

Riquier J., Cottet M. (2019) The Rhône River. In: Rivers of the Alps: Diversity in Nature and Culture. Muhar S., Muhar A., Siegrist D., Egger G. ISBN-13 : 978-3258081175. Haupt Verlag.

Sakho I. , Dussouillez P., Delanghe D., Hanot B., Raccasi G., Tal M., Sabatier F., Radakovitch O. (2019) Suspended sediment flux at the Rhone River mouth (France) based on ADCP measurements during flood events. *Environmental Monitoring and Assessment*, 191, 508. DOI: 10.1007/s10661-019-7605-y

Souignac F., Anneville O., Bouffard D., Chanudet V., Dambrine E., Guénand Y., Harmel T., Ibelings B. (2019) Contribution of 3D coupled hydrodynamic-ecological modeling to assess the representativeness of a sampling protocol for lake water quality assessment. *Knowledge & Management of Aquatic Ecosystems*. 11, 42. DOI: 10.1051/kmae/2019034

Uber M., Legout C., Nord G., Crouzet C., Demory F., Poulenard, J. (2019) Comparing alternative tracing measurements and mixing models to fingerprint suspended sediment sources in a meso-scale Mediterranean catchment, *Journal of Soils and Sediments*, 19, 3255–3273. DOI: 10.1007/s11368-019-02270-1

Vauclin S., Mourier B., Tena A., Piégay H., Winiarski T. (2020) Effects of river infrastructures on the floodplain sedimentary environment in the Rhône River. *Journal of Soils and Sediments*, 20, 2697–2708. DOI: 10.1007/s11368-019-02449-6

Vautrin F., Bergeron E., Dubost A., Abrouk D., Martin C., Cournoyer B., Louzier, V., Winiarski, T., Rodriguez-Nava, V., Pujic, P. (2019) Genome sequences of three *Nocardia cyriacigeorgica* strains and one *Nocardia asteroides* strain. *Microbiology Resource Announcements*, 8(33), e00600-19. DOI: 10.1128/mra.00600-19

Vázquez-Tarrío D., Tal M., Camenen B., Piégay H. (2019) Effects of continuous embankments and successive run-of-the-river dams on bedload transport capacities along the Rhône River, France. *Science of The Total Environment*, 658, 1375-1389. DOI: 10.1016/j.scitotenv.2018.12.109

Vázquez-Tarrío D., Recking A., Liébault F., Tal M., Menéndez-Duarte R. (2019) Particle transport in gravel-bed rivers: Revisiting passive tracer data. *Earth Surface Processes and Landforms*, 44, 112-128. DOI: 10.1002/esp.4484