

Liste globale des publications du RZA pour 2020

- Acuna V., Jorda-Capdevila D., Vezza P., De Girolamo A.M., McClain M., Stubbington R., Pastor A., Lamouroux N., Schiller D., Munné A., Datry T. (2020) Accounting for flow intermittency in environmental flows design. *Journal of Applied Ecology*, 57, 742-753. DOI: 10.1111/1365-2664.13590
- Aldomany M., Touchart L., Bartout P., Choffel Q. (2020) Une zone humide perd-elle autant, moins ou davantage d'eau par évapotranspiration qu'un étang par évaporation ? Etude expérimentale en Limousin. *Annales de Géographie*, 129(731) : 83-112.
- Alignier A., Sole-Senan X. O., Robleño I., Baraibar B., Fahrig L., Giralt D., Gross N., Martin J.-L., Recasens J., Sirami C., Siriwardena G., Bossem Baillod A., Bertrand C., Carrie R., Hass A., Henckel L., Miguet P., Badenhausser I., Baudry J., Bota G., Bretagnolle V., Brotons L., Burel F., Calatayud F., Clough Y., Georges R., Gibon A., Girard J., Lindsay K., Minano J., Mitchell S., Patry N., Poulin B., Tscharntke T., Vialatte A., Violle C., Yaverscovski N., Batary P. (2020) Configurational crop heterogeneity increases within-field plant diversity. *Journal of Applied Ecology*, 57, 654-663. DOI: 10.1111/1365-2664.13585
- Alignier A., Solé-Senan X.O., Robleño I., Baraibar B., Fahrig L., Giralt D., Gross N., Martin J.L., Recasens J., Sirami C. (2020) Configurational crop heterogeneity increases within-field plant diversity. *Journal of Applied Ecology*, 57, 4, 654-663. DOI: 10.1111/1365-2664.13585
- Allen D.C., Datry T., Boersma K., Bogan M.T., Boulton A.J., Bruno D., Busch M.H., Costigan K.H., Dodds W.K., Fritz K.M., Godsey S.E., Jones J.B., Kaletova T., Kampf S., Mims M.C., Neeson T.M., Olden J.D., Pastor A.V., LeRoy Poff N., Ruddell B.L., Ruhí A., Singer G., Vezza P., Ward A.S., Zimmer M.A. (2020) River ecosystem conceptual models and non-perennial rivers: A critical review. *Wiley Interdisciplinary Reviews: Water*, 7, e1473. DOI: 10.1002/wat2.1473
- Allier F., Barbottin A., Aupinel P., Bretagnolle V., Chabert A., Chabirand M., Chaigne G., Decourtey A., Georges G., Henry M., Lancien T., Michel N., Odoux J., Plantureux S., Tamic T., Toulet C., Vialloux F., Gourrat M., 2019, DEPHY-Abeille, un réseau de systèmes de grandes cultures innovants, économes en pesticides et favorables aux abeilles : Co-construction, mise à l'épreuve et évaluation, *Innovations Agronomiques*, 133-154. DOI:10.15454/ljuuog
- 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
- Altmann, M., Haas, F., Heckmann, T., Liébault, F., Becht, M. (2020) Modelling of sediment supply from torrent catchments in the Western Alps using the Sediment Contributing Area (SCA) approach. *Earth Surface Processes and Landforms*. DOI: 10.1002/esp.5046
- Alvarez-Vanhard E., Houet T., Mony C., Lecoq L., Corpelli T. (2020) Can UAVs fill the gap between in situ surveys and satellites for habitat mapping? *Remote Sensing of Environment*, 243, 111780. DOI: 10.1016/j.rse.2020.111780
- Andrade V.S., Wiegand C., Pannard A., Gagneten A.M., Pédrot M., Bouhnik-Le Coz M., Piscart C., (2020) How can interspecific interactions in freshwater benthic macroinvertebrates modify trace element availability from sediment? *Chemosphere*, 245, 125594. DOI: 10.1016/j.chemosphere.2019.125594

- Angelier F., Chastel O., Lendvai A.Z., Parenteau C., Weimerskirch H., Wingfield J.C. (2020) When do older birds better resist stress? A study of the corticosterone stress response in Snow petrels. *Biology Letters*, 16, 20190733. DOI: 10.1098/rsbl.2019.0733
- Antoine, G., Camenen, B., Jodeau, M., Némery, J., Esteves, M. (2020) Downstream erosion and deposition dynamics of fine suspended sediments due to dam flushing. *Journal of Hydrology*, 585, 124763. DOI: 10.1016/j.jhydrol.2020.124763
- Arnaud F., Lerigoleur E., Jean-Charles A., Le Berre I., Pardo C., Raynal J. C., ... & Roux-Michollet D. (2020) Managing and sharing multidisciplinary information in human-environment observatories: feedbacks and recommendations from the French DRIIHM network. *JIMIS*. DOI: 10.18713/JIMIS-120620-6-3
- Arroyo, B., Mougeot, F., Bretagnolle, V. (2020) Behavioural responses of Montagu's harrier females to nest visits and relationships with breeding success. Digital CSIC. DOI: 10.20350/digitalCSIC/10573
- Atinkpahoun C.N.H., M.N. Pons, P. Louis, J.P. Leclerc, H. Soclo (2020) Rare earth elements (REE) in the urban wastewater of Cotonou (Benin, West Africa). *Chemosphere*, 251, 126398. DOI: 10.1016/j.chemosphere.2020.126398.
- Bacouillard L., Baux N., Dauvin J.C., Desroy N., Geiger K.J., Gentil F., Thiébaut 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
- Badenhausser I., Gross N., Mornet V., Roncoroni M., Saintilan A., Rusch A. (2020) Increasing amount and quality of green infrastructures at different scales promotes biological control in agricultural landscapes. *Agriculture, Ecosystems and Environment*, 290, 106735. DOI: 10.1016/j.agee.2019.106735
- Balbi M., Croci S., Petit E.J., Butet A., Georges R., Madec L., Caudal J.P., Ernoult A. (2020) Least-cost path analysis for urban greenways planning: A test with moths and birds across two habitats and two cities. *Journal of Applied Ecology*. DOI: 10.1111/1365-2664.13800
- Barbraud C., Chaigne A., Loubon M., Lamy O., Le Bouard F. (2020) An estimate of the South Georgia diving petrel *Pelecanoides georgicus* population at Ile de La Possession, Crozet archipelago. *Antarctic Science*, 32, (4), 248-254. DOI: 10.1017/S095410202000019X
- Barbraud C., Delord K. (2020) Selection against immigrants in wild seabird populations. *Ecology Letters*, 24, 84-93. DOI:10.1111/ele.13624
- Barbraud C., Delord K., Bost C.-A., Chaigne A., Marteau C., Weimerckirch H. (2020) Population trends of penguins in the French Southern Territories. *Polar Biology*, 43, 835-850. DOI: 10.1007/s00300-020-02691-6
- Baudrot V., Fernandez-de-Simon J., Coeurdassier M., Couval G., Giraudoux P., Lambin X., (2020) Trophic transfer of pesticides: The fine line between predator-prey regulation and pesticide-pest regulation. *J. Appl. Ecol.* 57, 806–818. DOI : 10.1111/1365-2664.13578
- 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
- Beauger A., O. Voldoire, W. Carlos, E. Allain, F. Millan, V. Breton, S. Kolovi, L. Ector (2020) Biodiversity and ecology of diatoms in mineral springs of the area of Sainte Marguerite (Saint-Maurice-ès-Allier, Massif central, France). *BIOM*, 1(1), 21-34. DOI : 10.18145/biom.v1i1.250
- Belletti B., Garcia de Leaniz C., Jones J. et al. (2020) More than one million barriers fragment Europe's rivers. *Nature*, 588, 436–441. DOI: 10.1038/s41586-020-3005-2
- Bestley S., Ropert-Coudert Y., Bengtson Nash S., Brooks C., Cotté C., Dewar M., Friedlaender A.S., Jackson J.A., Labrousse S., Lowther A.D., McMahon C.R., Phillips R., Pistorius P.A., Puskic P.S., de A. Reis A.O., Reisinger R.R., Santos M.M., Tarszisz E., Tixier P., Trathan P.N., Wege M., Wienecke B. (2020) Marine Ecosystem Assessment for the Southern Ocean: seabirds and marine mammals in a changing climate. *Frontiers in Ecology and Evolution*, section Conservation, 8, 338. DOI: 10.3389/fevo.2020.566936
- 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., Grossel 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
- Binet S., Probst J.L., Batiot C., Seidel J.L., Emblanch C., Peyraube N., Charlier J.B., Bakalowicz M., Probst A. (2020) Global warming and acid atmospheric deposition impacts on carbonate dissolution and CO₂ fluxes in French karstic hydrosystems: evidence from hydrochemical monitoring during last decades. *Geochimica Cosmochimica Acta*, 270, 184-200. DOI: 10.1016/j.gca.2019.11.021
- 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
- Blanco J., Sourdril A., Deconchat M., Barnaud C., San Cristobal M., Andrieu E. (2020) How farmers feel about trees: Perceptions of ecosystem services and disservices associated with rural forests in southwestern France. *Ecosystem Services*, 42, 101066. DOI: 10.1016/j.ecoser.2020.101066
- Bolibar J., Rabatel A., Gouttevin I., Galiez C. (2020) A deep learning reconstruction of mass balance series for all glaciers in the French Alps: 1967–2015. *Earth System Science Data*, 12, 1973-1983. DOI: 10.5194/essd-12-1973-2020
- Bolibar J., Rabatel A., Gouttevin I., Galiez C., Condom T., Sauquet E. (2020) Deep learning applied to glacier evolution modelling. *The Cryosphere*, 14, 565-584. DOI: 10.5194/tc-14-565-2020
- 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
- Boulêtreau S., Carry L., Meyer E., Filloux D., Menchi O., Mataix V., Santoul F. (2020) High predation of native sea lamprey during spawning migration. *Scientific Reports*, 10, 6122. DOI: 10.1038/s41598-020-62916-w

Bourgeois B., Gaba S., Plumejeaud C., Bretagnolle V. (2020) Weed diversity is driven by complex interplay between multi-scale dispersal and local filtering. *Proceedings of Royal Society B*. DOI: 10.1098/rspb.2020.1118

Bourillon B., Acou A., Trancart T., Belpaire C., Covaci A., Bustamante P., Faliex E., Amilhat E., Malarvannan G., Virag L., Aarestrup K., Bervoets L., Boisneau C., Boulenger C., Gargan P., Becerra Jurado G., Lobón-Cerviá J., Maes, Ingemann Pedersen M., Poole R., Sjöberg N., Walker A., Wickström H., Righton D., Feunteun E. (2020) Assessment of the quality of European silver eels and tentative approach to trace the origin of contaminants – A European overview from the EELIAD project. *Science of The Total Environment*, 743, 40675. DOI: 10.1016/j.scitotenv.2020.140675

Bravo C., Pays O., Sarasa M., Bretagnolle V. (2020) Revisiting an old question: Which predators eat eggs of ground-nesting birds in farmland landscapes?, *Science of the Total Environment*, 744, 140895. DOI: 10.1016/j.scitotenv.2020.140895

Brousse G., Liébault F., Arnaud-Fassetta G., Breilh B., Tacon S. (2020) Gravel replenishment and active-channel widening for braided-river restoration: The case of the Upper Drac River (France). *Science of the Total Environment*, 766, 142517. DOI: 10.1016/j.scitotenv.2020.142517

Brumer S.E., Garnier V., Redelsperger J.-L., Bouin M.-N., Ardhuin F., Accensi M. (2020) Impacts of surface gravity waves on a tidal front: A coupled model perspective. *Ocean Modelling* 154, 101677. DOI: 10.1016/j.ocmod.2020.101677

Busch, M. Costigan K., Fritz K., Datry T., Krabbenhoft C., Hammond J., Zimmer M., Olden J.D., Burrows R., Dodds W., Boersma K., Shanafield M., Kampf S., Mims M., Bogan M., Ward A., Perez Rocha M., Godsey S.E., Allen G., Blaszczak J., Jones C.N., Allen D. (2020) What's in a name? Patterns, trends, and suggestions for defining non-perennial rivers and streams. *Water*, 12(7), 1980. DOI: 10.3390/w12071980

Carmona C.P., Guerrero I., Peco B., Morales M.B., Onate J.J., Part T., Tscharntke T., Liira J., Aavik T., Emmerson M., Berrndse F., Ceryngier P., Bretagnolle V., Weisser W.W., Bengtsson J. (2020) Agricultural intensification reduces plant taxonomic and functional diversity across European arable systems. *Functional Ecology*, 34(7), 1448-1460. DOI: 10.1111/1365-2435.13608

Carpenter-Kling T., Pistorius P., Reisinger R., Cherel Y., Connan M. (2020) A critical assessment of marine predator isoscapes within the southern Indian Ocean. *Movement Ecology*, 8, 29. DOI: 10.1186/s40462-020-00208-8

Caravavieri A., Bustamante P., Labadie P., Budzinski H., Chastel O., Cherel Y. (2020) Trace elements and persistent organic pollutants in chicks of 13 seabird species from Antarctica to the subtropics. *Environment International*, 134, 105225. DOI: 10.1016/j.envint.2019.105225

Cassel M., Piégay H., Fantino G., Lejot J., Bultingaire L., Michel K., Perret F. (2020) Comparison of ground-based and UAV a-UHF artificial tracer mobility monitoring methods on a braided river. *Earth Surface Processes and Landforms*, 77(5), 894-903. DOI: 10.1002/esp.4777

Cauvy-Fraunié S., Trenkel V. M., Daufresne M., Maire A., Capra H., Olivier J. M., ... & Lamouroux N. (2020) Interpretation of interannual variability in long-term aquatic ecological surveys. *Canadian Journal of Fisheries and Aquatic Sciences*, 77(5), 894-903. DOI: 10.1139/cjfas-2019-0146

- Chambon R., Latraube F., Bretagnolle V., Paillisson J.M. (2020) Sex-specific contributions to reproduction in whiskered tern *Chlidonias hybrida* colonies of varying breeding density. *Ardeola*, 67 (1), 113-125. DOI: 10.13157/arla.67.1.2020.sc6
- Chiapponi E., Henriot C.P., Bertrand X., Hocquet D., Bornette G., (2020). Using gfp-tagged escherichia colito investigate the persistence of fecal bacteria in vegetated wetlands: an experimental approach. *Antibiotics-Basel* 9, 335. DOI: 10.3390/antibiotics9060335
- Cirelli C., Fournier M., Bonnefond M., Servain S. (2020) Ouvrir les bras pour qu'on soit bien dans son lit. *Développement durable et territoires*, 11, 1. DOI : 10.4000/developpementdurable.17134
- Clay T. A., Joo R., Weimerskirch H., Phillips R. A., Ouden O. Den, Basille M., Clusella-Trullas S., Assink J. D., Patrick S. C. (2020) Sex-specific effects of wind on the flight decisions of a sexually dimorphic soaring bird. *Journal of Animal Ecology*, 89, (8), 1811-1823. DOI: 10.1111/1365-2656.13267
- Coclite G.M., Donadello C., Nguyen T.N.T. (2020) A PDE model for the spatial dynamics of a voles population structured in age. *Nonlinear Anal.-Theory Methods Appl.* 196, 111805. DOI: 10.1016/j.na.2020.111805
- Coeurdassier M., Bassin N., Powolny T., Morin C., Afonso E. (2020) Prevalence of hematozoan parasites in Red Kite nestlings from France. *J. Ornithol.* DOI: 10.1007/s10336-020-01838-w
- Collet J., Prudor A., Corbeau A., Mendez L., Weimerskirch H. (2020) First explorations: ontogeny of central-place foraging directions in two tropical seabirds. *Behavioral Ecology*, 31, (3), 815-825. DOI: 10.1093/beheco/araa028
- Collet J., Weimerskirch H. (2020) Albatrosses can memorize locations of predictable fishing boats but favour natural foraging. *Proceedings of the Royal Society B: Biological Sciences*, 287, 1932, 20200958. DOI: 10.1098/rspb.2020.0958
- Corbeau A., Prudor A., Kato A., Weimerskirch H. (2020) Development of flight and foraging behaviour in a juvenile seabird with extreme soaring capacities. *Journal of Animal Ecology*, 89, 1, 20-28. DOI: 10.1111/1365-2656.13121
- Cordier F., Tassi P., Claude N., Crosato A., Rodrigues S., Pham van Bang D. (2020) Bar pattern and sediment sorting in a channel contraction/expansion: application to the Loire river at Bréhémont (France). *Advances in Water Resources*, 140, 103580. DOI: 10.1016/j.advwatres.2020.103580
- Corenblit D., Steiger J., Mazal L., Till-Bottraud I. (2020) Relier la biogéomorphologie fluviale à l'écologie évolutive: un focus sur les arbres riverains pionniers. *Géomorphologie: relief, processus, environnement*, 26, 55-72. DOI : 10.4000/geomorphologie.14127
- Corenblit D., Vautier F., González E., Steiger J. (2020) Formation and dynamics of vegetated fluvial landforms follow the biogeomorphological succession model in a channelized river. *Earth Surface Processes and Landforms*, 45, 2020-2035. DOI: 10.1002/esp.4863
- Cox S., Authier M., Orgeret F., Weimerskirch H., Guinet C. (2020) High mortality rates in a juvenile free-ranging marine predator and links to dive and forage ability. *Ecology and Evolution*, 10(1):410-430. DOI: 10.1002/ece3.5905.

- Culina A, Adriaensen F., Bailey L.D. et al. (2020) Connecting the data landscape of long-term ecological studies: the SPI-Birds data hub. *Journal of Animal Ecology*. DOI: 10.1111/1365-2656.13388
- Da Silva A.M., Courquet S., Raoul F., Rieffel D., Giraudoux P., Millon L., Knapp, J. (2020) Assessment of the exposure to *Echinococcus multilocularis* associated with carnivore faeces using real-time quantitative PCR and flotation technique assays. *Int. J. Parasit.* 50, 1195–1204. DOI: 10.1016/j.ijpara.2020.07.008
- 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
- De Castro-Català N., Dolédec S., Kalogianni E., Skoulikidis N.T., Paunovic M., Vasiljević B., Sabater S., Tornés E., Muñoz I. (2020) Unravelling the effects of multiple stressors on diatom and macroinvertebrate communities in European river basins using structural and functional approaches. *Science of the Total Environment*, 742, 140543. DOI: 10.1016/j.scitotenv.2020.140543
- Delebecq G., Schmidt S., Ehrhold A., Latimier M., Siano R. (2020) Revival of ancient marine dinoflagellates using molecular biostimulation. *J. Phycol.*, 56, 1077–1089. DOI: 10.1111/jpy.13010
- Delile H., Masson M., Miège C., Le Coz J., Poulier G., Le Bescond C., Radakovitch O., Coquery M. (2020) Hydro-climatic drivers of land-based micropollutant fluxes the regime of the largest river water inflow of the Mediterranean Sea. *Water Research*, 185, 116067. DOI: 10.1016/j.watres.2020.116067
- Delord K., Kato A., Tarroux A., Orgeret F., Cotté C., Ropert-Coudert Y., Cherel Y., Descamps S. (2020) Antarctic petrels ‘on the ice rocks’: wintering strategy of an Antarctic seabird. *Royal Society Open Science* 7(4), 191429. DOI: 10.1098/rsos.191429
- Delplace, G., Schreck E. Pokrovsky O.S. et al. (2020) Accumulation of heavy metals in phytoliths from reeds growing on mining environments in Southern Europe. *Science of The Total Environment*, 712, 135595. DOI: 10.1016/j.scitotenv.2019.135595
- 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
- Dendievel A.-M., Mourier B., Dabrin A., Barra A., Bégorre C., Delile H., Hammada M., Lardaix G., Berger J.-F. (2020) Dataset of natural metal background levels inferred from pre-industrial palaeochannel sediment cores along the Rhône River (France). *Data in Brief*, 32, 106256. DOI: 10.1016/j.dib.2020.106256
- Dendievel A.-M., Mourier B., Dabrin A., Delile H., Coynel A., Gosset A., Liber Y., Berger J.-F., Bedell J.-P. (2020) Metal pollution trajectories and mixture risk assessed by combining dated cores and subsurface sediments along a major European river (Rhône River, France). *Environment International*, 144, 106032. DOI: 10.1016/j.envint.2020.106032

- Deroulers P., Gauffre B., Emeriau S., Harismendy A., Bretagnolle V. (2020) Towards a standardized experimental protocol to investigate interactions between weed seeds and ground beetles (Carabidae, Coleoptera). *Arthropod-Plant Interactions*. 2020. 14 (1), 127-138. DOI: 10.1007/s11829-019-09721-z
- Desmau M., Carboni A., Le Bars M., Doelsch E., Benedetti M.F., Auffan M., Levard C., Gelabert A. (2020) How microbial biofilms control the environmental fate of engineered nanoparticles? *Front. Environ. Sci.* 8, 82. DOI: 10.3389/fenvs.2020.00082
- Donati F., Touchart L., Bartout P. (2020) Les seuils en rivière transforment-ils les milieux lotiques en milieux lenticques ?. *Physio-Géo*, 15, 111-131. DOI : 10.4000/physio-geo.11024
- 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
- Dudill A., Venditti J.G., Church M., Frey P. (2020) Comparing the behaviour of spherical beads and natural grains in bedload mixtures. *Earth Surface Processes and Landforms*, 45(4), 831-840. DOI: 10.1002/esp.4772
- Dufour, V., Wiest L., Slaby S., Le Cor F., Auger L., Cardoso O., Curtet L., Pasquini L., Dauchy X., Vulliet E., Banas D. (2020) Development of a simple multiresidue extraction method for the quantification of a wide polarity range list of pesticides and transformation products in eggs by liquid chromatography and tandem mass spectrometry. *Journal of Chromatography A*, 1628, 461447. DOI: 10.1016/j.chroma.2020.461447
- Dupont S., Barbraud C., Chastel O., Delord K., Parenteau C., Ribout C., Angelier F. (2020) Do repeated captures and handling affect phenotype and survival of growing Snow Petrel (*Pagodroma nivea*). *Polar Biology*, 43, 637-646. DOI: 10.1007/s00300-020-02666-7
- El Mendili L., Puissant A., Chougrad M., Sebari I. (2020) Towards a multi-temporal deep learning approach for mapping urban fabric using Sentinel 2 images. *Remote Sensing*, 12(3), 423. DOI : 10.3390/rs12030423.
- Espel D., Courty S., Auda Y., Sheeren D., Elger A. (2020) Submerged macrophyte assessment in rivers: an automatic mapping method using Pléiades imagery. *Water Research*, 186, 116353. DOI: 10.1016/j.watres.2020.116353
- Fabri-Ruiz S., Danis B., Navarro N., Koubbi P., Laffont R., Saucède T. (2020) Benthic Ecoregionalization of the Southern Ocean supports current proposals of Antarctic Marine Protected Areas under IPCC scenarios of climate change. *Global Change Biology*, 26(4), 2161-2180. DOI: 10.1111/gcb.14988
- Featherstone A.M., Butler P.G., Schoene B.R., Peharda M., Thebault J. (2020) A 45-year sub-annual reconstruction of seawater temperature in the Bay of Brest, France, using the shell oxygen isotope composition of the bivalve *Glycymeris glycymeris*. *Holocene* 30, 3–12. DOI: 10.1177/0959683619865592
- Ferry N., Cordonnier M., Hulot F. D., Dakwa F., Sebele L., Dray S., Fritz H., Valeix, M. (2020) Heterogeneity of water physico-chemical characteristics in artificially pumped waterholes: do African herbivores drink at the same locations and does it lead to interference competition?. *Journal of Arid Environments*, 173: 104014. DOI: 10.1016/j.jaridenv.2019.104014

- Ferry N., Mbizah M. M., Loveridge A. J., Macdonald D. W., Dray S., Fritz H., Valeix, M. (2020) Can an herbivore affect where a top predator kills its prey by modifying woody vegetation structure?. *Oecologia*, 192: 779-789. DOI: 10.1007/s00442-020-04617-9
- Flaminio S. (2020) Representations of dams: infrastructures, concessions and controversies. *La Houille Blanche*, 1, 79-80. DOI: 10.1051/lhb/2020010
- Fleury E., Barbier P., Petton B., Normand J., Thomas Y., Pouvreau S., Daigle G., Pernet F. (2020) Latitudinal drivers of oyster mortality: deciphering host, pathogen and environmental risk factors. *Sci Rep*, 10, 7264. DOI: 10.1038/s41598-020-64086-1
- Forcellini M., Plichard L., Dolédec S., Mérigoux S., Olivier J.M., Cauvy-Fraunié S., Lamouroux N. (2020) Microhabitat selection by macroinvertebrates: generality among rivers and functional interpretation. *Journal of Ecohydraulics*, 1-14. DOI: 10.1080/24705357.2020.1858724
- Foucher A., Evrard O., Cerdan O., Chabert C., Lecompte F., Lefèvre I., Vandromme R., Salvador-Blanes S. (2020) A quick and low-cost technique to identify layers associated with heavy rainfall in sediment archives during the Anthropocene. *Sedimentology*, 67(1) 486-510. DOI: 10.1111/sed.12650
- Foucher A., Evrard O., Huon S., Curie F., Lefèvre I., Vaury V., Cerdan O., Vandromme R., Salvador-Blanes S. (2020) Regional trends in eutrophication across the Loire river basin during the 20th century based on multi-proxy paleolimnological reconstructions. *Agriculture Ecosystems and Environment*, 301, 107065. DOI : 10.1016/j.agee.2020.107065.
- Foucher, A., Evrard, O., Ficetola, F., Gielly, L., Poulain, J., Giguet-Covex, C., Laceby, J.-P., Salvador-Blanes, S., Cerdan, O., Poulenard, J. 2020. Persistence of environmental DNA in cultivated soils: implication of this memory effect for reconstructing the dynamics of land use and cover changes. *Scientific Reports*, 10:10502, DOI: 10.1038/s41598-020-67452-1.
- Fourcade Y., Richardson D.S., Secondi J. (2020) No evidence for a loss of genetic diversity despite a strong decline in size of a European population of the corncrake Crex crex. *Bird Conservation International*. 30(2) 260-266. DOI: 10.1017/S0959270919000327
- Frey P., Lafaye de Micheaux H., Bel C., Maurin R., Rorsman K., Martin T., Ducottet C. (2020) Experiments on grain size segregation in bedload transport on a steep slope. *Advances in Water Resources*, 136, 103478. DOI: 10.1016/j.advwatres.2019.103478
- 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
- Fromant A., Bost C.-A., Bustamante P., Carravieri A., Cherel Y., Delord K., Eizenberg Y. H., Miskelly C. M., Arnould J. P. Y. (2020) Temporal and spatial differences in the postbreeding behaviour of a ubiquitous Southern Hemisphere seabird, the common diving petrel. *Royal Society Open Science*, 7(11), 200670. DOI: 10.1098/rsos.200670
- Fromant A., Miskelly C. M., Arnould J. P. Y., Bost C.-A. (2020) Artificial burrows as a tool for long-term studies of diving petrels. *Polar Biology*, 43(5), 435-442. DOI: 10.1007/s00300-020-02645-y
- Fuster M., Billard H., Mandart M., Steiger J., Sime-Ngando T., Colombe, J. (2020) Trophic conditions influence widespread distribution of Aster-Like Nanoparticles within aquatic environments. *Microbial Ecology*, 80, 741–745. DOI: 10.1007/s00248-020-01541-6

- Gaba S., Bretagnolle V. (2020) Social–ecological experiments to foster agroecological transition. *People And Nature*. 2(2) 3317-327. DOI: 10.1002/pan3.10078
- Gaba S., Cheviron N., Perrot T., Piutti S., Gautier J-L., Bretagnolle V. (2020) Weeds enhance multifunctionality in Arable Lands in South-West of France. *Frontiers in Sustainable Food Systems*. 2020, 4, 71. DOI: 10.3389/fsufs.2020.00071
- Gamble A., Bazire R., Delord K., Barbraud C., Jaeger A., Gantelet H., Thibault E., Lebarbenchon C., Lagadec E., Tortosa P., Weimerskirch H., Thiebot J.-B., Garnier R., Tornos J., Boulinier T. (2020) Predator and scavenger movements among and within endangered seabird colonies: Opportunities for pathogen spread. *Journal Applied Ecology*, 57(2) 367-378. DOI: 10.1111/1365-2664.13531
- Gamble A., Garnier R., Chambert T., Gimenez O., Boulinier T. (2020) Next generation serology: integrating cross-sectional and capture-recapture approaches to infer disease dynamics. *Ecology* 101, e02923. DOI: 10.1002/ecy.2923
- Gamble A., Weimerskirch H., Boulinier T. (2020) Seabirds blinded by ticks. *Frontiers in Ecology and the Environment (EcoPics)*, 18(6), 322. DOI: 10.1002/fee.2237.
- Garcia J.T., Dominguez-Villasenor J., Alda F., Calero-Riestra M., Pérez Olea P., Fargallo J., Martínez-Padilla J., Herranz J., Oñate J., Santamaría A., Motro Y., Attié C., Bretagnolle V., Delibes J., Vinuela J. (2020) A complex scenario of glacial survival in Mediterranean and continental refugia of a temperate continental vole species (*Microtus arvalis*) in Europe. *Journal Of Zoological Systematics And Evolutionary Research*. 58: 459-474. DOI: 10.1111/jzs.12323
- Gauthier M., Launay B., Pella H., Douady C., Datry T. (2020) Drying alter metacommunity dynamics across multiple river networks. *Freshwater Biology*, 65, 2169-2185. DOI: 10.1111/fwb.13611
- Gauthier M., Konecny-Dupré L., Nguyen A., Elbrecht V., Datry T., Douady C., Lefébure T. (2020) Enhancing DNA metabarcoding performance and applicability with bait capture enrichment and DNA from conservative ethanol. *Mol Ecol Resour*, 20, 79–96. DOI: 10.1111/1755-0998.13088
- Gilet L., Gob F., Gautier E., Houbrechts G., VirmouxC., 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
- Giraudoux P., Levret A., Afonso E., Coeurdassier M., Couval G. (2020) Numerical response of predators to large variations of grassland vole abundance and long-term community changes. *Ecol. Evol.* 10, 14221–14246. DOI:10.1002/ece3.7020
- Godet C., Robuchon M., Leroy B., Cotté C., Baudena A., Da Silva O., Fabri-Ruiz S., Lo Monaco C., Sergi S., Koubbi P. (2020) Matching zooplankton abundance and pelagic bioregions. *Deep-Sea Research Part I*, 163: 103347. DOI: 10.1016/j.dsr.2020.103347
- Gosset A., Polomé P., Perrodin Y. (2020) Ecotoxicological risk assessment of micropollutants from treated urban wastewater effluents for watercourses at a territorial scale: Application and comparison of two approaches. *International Journal of Hygiene and Environmental Health*, 224, 113437. DOI: 10.1016/j.ijheh.2019.113437
- Gossiaux A., Rollin M., Guérard F., Felten V., Laviale M., Bachelet Q., Poupin P., Chauvet E., Bec A., Danger M. (2020) Temperature and nutrient effects on the relative importance of brown and

green pathways for stream ecosystem functioning: A mesocosm approach. *Freshwater Biology*, 65, 1239–1255. DOI: 10.1111/fwb.13474

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

Guillam M., Bessin C., Blanchet-Aurigny A., Cugier P., Nicolle A., Thiebaut E., Comtet T. (2020) Vertical distribution of brittle star larvae in two contrasting coastal embayments: implications for larval transport. *Sci Rep*, 10, 12033. DOI: 10.1038/s41598-020-68750-4

Guillaumot C., Danis B., Saucède T. (2020) Selecting environmental descriptors is critical for modelling the distribution of Antarctic benthic species. *Polar Biology*, 43, 1363–1381. DOI : 10.1007/s00300-020-02714-2

Guillaumot C., Moreau C., Danis B., Saucède T. (2020) Extrapolation in species distribution modelling. Application to Southern Ocean marine species. *Progress in Oceanography*, 188, 102438. DOI: 10.1016/j.pocean.2020.102438

Guillossou R., Le Roux J., Brosillon S., Mailer 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., Mailer 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., Mailer R., Pereira-Derome C.S., Varraud 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

Hervé P., Tiegs S., Grellier S., Wantzen K.M., Isselin-Nondedieu F. (2020) Monitoring organic-matter decomposition and environmental drivers in restored vernal pools. *Wetland ecology and management*, DOI: 10.1007/s11273-020-09759-4

Hicks O., Kato A., Angelier F., Wisniewska D., Hambly C., Speakman J., Marciau C., Ropert-Coudert Y. (2020) Penguin power: acceleration predicts energy expenditure in a fat, flightless, diving bird. *Scientific Reports*, 10, 21493. DOI: 10.1038/s41598-020-78025-7

Hindell M., Reisinger R., Ropert-Coudert Y., Huckstadt L., Trathan P., Bornemann H., Charrassin J.-B., Shown S., Costa D. P., Danis B., Lea M. A., Thompson D., Torres L., Van De Putte A., Alderman R., Andrews-Goff V., Arthur B., Ballard G., Bengtson J., Bester M., Blix A. S., Boehme L., Bost C.-A., Boveng P., Cleeland J., Constantine R., Corney S., Crawford R., Dalla Rosa L., De Bruyn P. J. N., Delord K., Descamps S., Double M. C., Emmerson L., Fedak M., Friedlaender A., Gales N., Goebel M., Goetz K., Guinet C., Goldsworthy S., Harcourt R., Hinke J., Jerosch K., Kato A., Kerry K., Kirkwood R., Kooyman G., Kovacs K., Lawton K., Lowther A., Lydersen C., Lyver P., Makhado

- A., Marquez M., McDonald B., McMahon C., Muelbert M., Nachtsheim D., Nicholls K., Nordøy E., Olmastroni S., Phillips R., Pistorius P., Plötz J., Pütz K., Ratcliffe N., Ryan P., Santos M., Southwell C., Staniland I., Takahashi A., Tarroux A., Trivelpiece W., Wakefield E., Weimerskirch H., Wienecke B., Xavier J., Wotherspoon S., Jonsen I., Raymond B. (2020) Tracking of marine predators to protect Southern Ocean ecosystems. *Nature*, 580, 87–92. DOI: 10.1038/s41586-020-2126-y
- Hulot F. D., Msiteli-Shumba S., Bonhomme M., Legendre S. (2020) Temporal changes in food web structure in semiarid waterholes. *Inland Waters*, 1-9. DOI: 10.1080/20442041.2020.1754112
- Igos E., Mailler R., Guilloisou 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
- Iles D. T., Lynch H., Ji R., Barbraud C., Delord K., Jenouvrier S. (2020) Sea ice predicts long-term trends in Adélie penguin population growth, but not annual fluctuations: Results from a range-wide multi-scale analysis. *Global Change Biology*, 26, 3788-3798. DOI:10.1111/gcb.15085
- Jabiol J., Colas F., Guérolé F. (2020) Cotton-strip assays: Let's move on to eco-friendly biomonitoring! *Water Research*, 170, 115295. DOI: 10.1016/j.watres.2019.115295
- Jabiol J., Gossiaux A., Lecerf A., Rota T., Guérolé F., Danger M., Poupin P., Gilbert F., Chauvet E. (2020) Variable temperature effects between heterotrophic stream processes and organisms. *Freshwater Biology*, 65, 1543-1554. DOI: 10.1111/fwb.13520
- Jabot F., Laroche F., Massol F., Arthaud F., Crabot J., Dubart M., Blanchet S., Munoz F., David P., Datry, T. (2020) Assessing metacommunity processes through signatures in spatiotemporal turnover of community composition. *Ecology Letters*, 23, 1330-1339. DOI: 10.1111/ele.13523
- Jacob J., Imholt C., Caminero-Saldaña C., Couval G., Giraudoux P., Herrero-Cófreces S., Horváth G., Luque-Larena J.J., Tkadlec E., Wymenga E. (2020) Europe-wide outbreaks of common voles in 2019. *J Pest Sci* 93, 703–709. DOI: 10.1007/s10340-020-01200-2
- Jaeger A., Gamble A., Lagadec E., Lebarbenchon C., Bourret V., Tornos J., Barbraud C., Lemberger K., Delord K., Weimerskirch H., Thiebot J.-B., Boulinier T., Tortosa P. (2020) Impact of annual bacterial epizootics on albatross population on a remote island. *EcoHealth*, 17, 194-202. DOI: 10.1007/s10393-020-01487-8
- Jansen J., Dunstan P.K., Hill N.A., Koubbi P., Melbourne-Thomas J., Causse R., Craig, J.R. (2020) Integrated assessment of the spatial distribution and structural dynamics of deep benthic marine communities. *Ecological applications*, 30(3) e02065. DOI:10.1002/eap.2065.
- Jeliazkov A.,..., Dolédec S. (2020) A global database for metacommunity ecology, integrating species, traits, environment and space. *Scientific Data*, 7, 6. DOI: 10.1038/s41597-019-0344-7
- Jenouvrier S., Holland M., Iles D., Labrousse S., Landrum L., Garnier J., Caswell H., Weimerskirch H., LaRue M., Ji R. (2019). The Paris Agreement objectives will likely halt future declines of emperor penguins. *Global Change Biology*, 26(3): 1170-1184. DOI: 10.1111/gcb.14864.
- Joliet F., van Tilburgh V. (2020) La valeur d'existence du monde vivant selon les Inuits du Nunavik et les Occidentaux aux Kerguelen. *Annales de Géographie*, 732(2) : 31-52.

- Jurado X., Reiminger N., Vazquez J., Wemmert C., Dufresne M., Blond N., Wertel J. (2020) Assessment of mean annual NO₂ concentration based on a partial dataset. *Atmospheric Environment*, 221, 117087. DOI: 10.1016/j.atmosenv.2019.117087.
- 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
- Karasiewicz S., Chapelle A., Bacher C., Soudant D. (2020) Harmful algae niche responses to environmental and community variation along the French coast. *Harmful Algae* 93, 101785. DOI: 10.1016/j.hal.2020.101785
- 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
- Keller P., Catalan N., Von Schiller D., Grossart H.-P., Koschorreck M., Obrador B., Frassl M., Karakaya N., Barros N., Howitt J., Mendoza-Lera C., Pastor A., Flaim G., Aben R., Riis T., Arce M., Onandia G., Paranaíba J., Linkhorst A., Del Campo R., Amado A., Cauvy-Fraunié S., Brothers S., Condon J., Mendonça R., Reverey F., Röööm E.-I., Datry T., Roland F., Laas A., Obertegger U., Park J.-H., Wang H., Kosten S., Gomez R., Feijoó C., Elosegi A., Sánchez-Montoya M., Finlayson C., M., Melita M., Oliveira Junior E., Muniz C., Gómez-Gener L., Leigh C., Zhang Q., Marcé R. (2020) Global CO₂ emissions from dry inland waters share common drivers across ecosystems. *Nature Communications*, 11, 1-8. DOI: 10.1038/s41467-020-15929-y
- Kletty F., Pelé M., Capber F., Habold C. (2020) Are all conservation measures for endangered species legitimate? *Frontiers in Ecology and Evolution*, 8. DOI: 10.3389/fevo.2020.536937.
- Knapp J., Gottstein B., Bretagne S., Bart J.-M., Umhang G., Richou C., Bresson-Hadni S., Millon L., (2020) Genotyping *Echinococcus multilocularis* in human alveolar echinococcosis patients: an EmsB microsatellite analysis. *Pathogens* 9, 282. DOI: 10.3390/pathogens9040282
- Korboulewsky N., Balandier P., Dumas Y., Gosselin M., Mårell A., Perot T. (2020) Quels intérêts et limites du mélange d'essences face aux changements globaux ? *Forêt-Entreprise* 252: 60-64.
- Kriesell H. J., Le Bohec C., Cerwenka A.F., Hertel M., Robin J.-P., Ruthensteiner B., Gahr M., Aubin T., Düring D. N. (2020) Vocal tract anatomy of king penguins: Morphological traits of two-voiced sound production. *Frontiers in Zoology*, 17:5. DOI: 10.1186/s12983-020-0351-8
- Labry C., Delmas D., Moriceau B., Gallinari M., Quere J., Younenou A. (2020) Effect of P depletion on the functional pools of diatom carbohydrates, and their utilization by bacterial communities. *Mar. Ecol.-Prog. Ser.*, 641, 49–62. DOI: 10.3354/meps13297
- Lambert C., Penaud A., Vidal M., Gandini C., Labeyrie L., Chauvaud L., Ehrhold A. (2020) Striking forest revival at the end of the Roman Period in north-western Europe. *Scientific Reports*, 10, 21984. DOI: 10.1038/s41598-020-77253-1
- Lamonica D., Drouineau H., Capra H., Pella H., Maire A. (2020) A framework for pre-processing individual location telemetry data for freshwater fish in a river section. *Ecological Modelling*, 431, 109190. DOI: 10.1016/j.ecolmodel.2020.109190

- Laquaz M., Dagot C., Wiest L., Bazin C., Gaschet M., Perrodin Y. (2020) Ecotoxicity and antibiotic resistance of wastewater during transport in an urban sewage network. *Environmental Science and Pollution Research*, 27, 16, 19991-19999. DOI: 10.1007/s11356-020-07982-3
- Le Berre I., Brosset D. (2020) Decision making by urban patterns identification: application to the Breton shoreline. *CyberGeo* 935. DOI: 10.4000/cybergeo.34137
- 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
- Le Provost G., Badenhausser I., Le Bagousse-Pinguet Y., Clough Y., Henckel L., Violle C., Bretagnolle V., Roncoroni M., Manning P., Gross N. (2020) Land-use history impacts functional diversity across multiple trophic groups. *Proceedings of the National Academy of Sciences (PNAS)*. 117: 1573-1579. DOI: 10.1073/pnas.1910023117
- Le Goff L. (2020) De l'estran à l'assiette : exemples de l'exploitation des invertébrés marins et terrestres par les populations monastiques au Moyen Âge et à l'époque moderne. *Annales de Bretagne et des pays de l'Ouest*, 127-1, 83–114.
- Lebouvier M., Lambret P., Garnier A., Frenot Y., Vernon P., Renault D. (2020) Spotlight on the invasion of a carabid beetle on an oceanic island over a 100 year period. *Scientific Reports*, 10, 17103. DOI: 10.1038/s41598-020-72754-5
- Lécrivain N., Duparc A., Clément B., Naffrechoux E., Frossard V. (2020) Tracking sources and transfer of contamination according to pollutants variety at the sediment-biota interface using a clam as bioindicator in peri-alpine lakes. *Chemosphere*, 238, 124569. DOI: 10.1016/j.chemosphere.2019.124569
- Ledieu L., Simonneau A., Cerdan O., Négrel P., Laperche V., Grosbois C., Laggoun-Défarge F. (2020) Geochemical insights into spatial and temporal evolution of sediment at catchment scale (Egoutier stream, France). *Appl. Geochem.*, 122, 104743. DOI: 10.1016/j.apgeochem.2020.104743
- Lemonnier C., Perennou M., Eveillard D., Fernandez-Guerra A., Leynaert A., Marié L., Morrison H.G., Memery L., Paillard C., Maignien L. (2020) Linking spatial and temporal dynamic of bacterioplankton communities with ecological strategies across a coastal frontal area. *Front. Mar. Sci.*, 7, 376. DOI: 10.3389/fmars.2020.00376
- Lepage H., Launay M., Le Coz J., Angot H., Miège C. (2020) Impact of dam flushing operations on sediment dynamics and quality in the upper Rhône River, France. *Journal of Environmental Management*, 225, 109886. DOI: 10.1016/j.jenvman.2019.109886
- Levy H., Fiddaman S.R., Vianna J.A., Noll D., Clucas G.V., Sidhu J.K.H., Polito M.J., Bost C.A., Phillips, R.A., Crofts S., Miller G.D., Pistorius P., Bonadonna F., Le Bohec C., Barbosa A., Trathan P., Rey A.R., Frantz L.A.F., Hart T., Smith A.L. (2020) Evidence of pathogen-induced immunogenetic selection across the large geographic range of a wild seabird. *Molecular Biology and Evolution*, 37(6), 1708-1726. DOI: 10.1093/molbev/msaa040

- Li P., Kleijn D., Badenhausser I., Zaragoza-Trello C., Gross N., Raemakers I., Scheper J. (2020) The relative importance of green infrastructure as refuge habitat for pollinators increases with local land-use intensity. *Journal of Applied Ecology*, 57(8), 1494-1503. DOI: 10.1111/1365-2664.13658
- Louis P., Messaoudene A., Jrad H., Adboul-Hamid B.A., Vignati D.A.L., Pons M.N. (2020) Understanding Rare Earth Elements concentrations, anomalies and fluxes at the river basin scale: the Moselle River (France) as a case study. *Science of the Total Environment*, 742, 140619. DOI: 10.1016/j.scitotenv.2020.140619
- Marano R.B.M., ... Merlin C., ... Guilloteau H., ... Pons M.N., ... et al. (2020) A global multinational survey of cefotaxime-resistant coliforms in urban wastewater treatment plants. *Environment International*, 144, 106035. DOI: 10.1016/j.envint.2020.106035.
- 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
- Marmonier P., Creuzé des Châtelliers M., Dole-Olivier M.J., Radakovich O., Mayer A., Chapuis H., Graillot D., Re-Bahuau J., Johannet A., Cadilhac L. (2020) Are surface water characteristics efficient to locate hyporheic biodiversity hotspots? *Science of The Total Environment*, 738, 139930. DOI: 10.1016/j.scitotenv.2020.139930
- Martak D., Henriot C.P., Broussier M., Couchoud C., Valot B., Richard M., Couchot J., Bornette G., Hocquet D., Bertrand X. (2020) High Prevalence of human-associated Escherichia coli in wetlands located in Eastern France. *Front. Microbiol.* 11, 552566. DOI: 10.3389/fmicb.2020.552566
- Martin A., Y. Hassan-Loni, A. Fichtner O. Peron, K. David, P. Chardon, S. Larrue, A. Gourgiotis, S. Sachs, T. Arnold, B. Grambow, T. Stumpf, G. Montavon (2020) An integrated approach combining soil profile, records and tree ring analysis to identify the origin of environmental contamination in a former uranium mine (Rophin, France). *Science of the Total Environment*, 747, 141295. DOI : 10.1016/j.scitotenv.2020.141295
- Martin, H., Monnet, JM., De Boisvilliers, M., Chevalier, R., Villar, M. (2020) Remote sensing of American maple in alluvial forests : a case study in an islands complex of the Loire Valley (France). *Iforest - Biogeosciences and Forestry*, 13(5), 409-416. DOI: 10.3832/ifor3237-013
- Marx T., Bernard N., Parmentier A.-L., Puyraveau M., Martin B., Gantelet M., Pretalli J.-B., Dolphin J.-C., Mauny F., Desmettre T. (2020) Short term association between air pollution (PM10, NO₂ and O₃) and secondary spontaneous pneumothorax. *Sci Rep* 10, 11823. DOI: 10.1038/s41598-020-68831-4
- Mbizah M. M., Farine D. R., Valeix M., Hunt J. E., Macdonald D. W., Loveridge A. J. (2020) Effect of ecological factors on fine-scale patterns of social structure in African lions. *Journal of Animal Ecology*, 89(11): 2665-2676. DOI: 10.1111/1365-2656.13334
- 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*, DOI: 10.1016/j.ijsrc.2020.07.003
- Mercier A., Betbeder J., Baudry J., Le Roux V., Spicher F., Lacoux J., Roger D., Hubert-Moy L., (2020) Evaluation of Sentinel-1 & 2 time series for predicting wheat and rapeseed phenological

stages. ISPRS Journal of Photogrammetry and Remote Sensing, 163, 231-256. DOI: 10.1016/j.isprsjprs.2020.03.009

Mercier A., Betbeder J., Rapinel S., Jegou N., Baudry J., Hubert-Moy L., (2020) Evaluation of Sentinel-1 and-2 time series for estimating LAI and biomass of wheat and rapeseed crop types. Journal of applied remote sensing, 14, 2, 024512. DOI: 10.11117/1.JRS.14.024512

Merlin C. (2020) Reducing the consumption of antibiotics: would that be enough to slow down the dissemination of resistances in the downstream environment? Front Microbiol. 11, 33. DOI: 10.3389%2Ffmicb.2020.00033

Mermilliod-Blondin F., Marmonier P., Tenaille M., Lemoine D.G., Lafont M., Vander Vorste R., Simon L., Volatier L. (2020) Bottom-up processes control benthic macroinvertebrate communities and food web structure of fishless artificial wetlands. Aquat Ecol, 54, 575–589. DOI: 10.1007/s10452-020-09760-2

Meur-Ferec C., Berre I.L., Cocquempot L., Guillou É., Henaff A., Lami T., Dantec N.L., Letortu P., Philippe M., Noûs C. (2020) Une méthode de suivi de la vulnérabilité systémique à l'érosion et la submersion marines. Développement Durable, 11(1). DOI : 10.4000/developpementdurable.16731

Michelot C., Kato A., Raclot T., Ropert-Coudert Y. (2020) Adélie penguins foraging consistency and site fidelity are conditioned by breeding status and environmental conditions. Plos ONE, 16(1), e0244298. DOI: 10.1371/journal.pone.0244298

Michelot C., Kato A., Raclot T., Shiomi K., Goulet P., Bustamante P., Ropert-Coudert Y. (2020) Sea-ice edge is more important than closer open water access for foraging Adélie penguins: evidence from two colonies. Marine Ecology Progress Series 640, 215-230. DOI: 10.3354/meps13289

Michelot T., Blackwell P.G., Chamaillé-Jammes S., Matthiopoulos J. (2020) Inference in MCMC step selection models. Biometrics 76, 438-447. DOI: 10.1111/biom.13170

Millan F., C. Izere, V. Breton, O. Voldoire, DG Biron, CE Wetzel, D Miallier, E. Allain, L. Ector, A. Beauger (2020) The effect of natural radioactivity on diatom communities in mineral springs. Botany Letters, 1, 95-113. DOI: 10.1080/23818107.2019.1691051

Misset C., Recking A., Legout C., Bakker M., Bodereau N., Borgniet L., Cassel M., Geay T., Gimbert F., Navratil O., Piégay H., Valsangkar N., Cazilhac M., Poirel A., Zanker S. (2020) Combining multi-physical measurements to quantify bedload transport and morphodynamics interactions in an Alpine braiding river reach. Geomorphology, 351, 106877. DOI: 10.1016/j.geomorph.2019.106877

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

Montoya D., Gaba S., De Mazancourt C. et al. Reconciling biodiversity conservation, food production and farmers' demand in agricultural landscapes. Ecological Modelling, 416, 108889. DOI: 10.1016/j.ecolmodel.2019.108889

Morel M., Booker D., Gob F., Lamouroux N. (2020) Consistent theoretical and empirical predictions of at-a-station hydraulic geometry exponents in stream reaches. Water Resources Research, 56, e2020WR027242. DOI: 10.1029/2020wr027242

- Morel M., Booker D., Gob F., Lamouroux N. (2020) Intercontinental predictions of river hydraulic geometry from catchment physical characteristics. *Journal of Hydrology*, 582, 124292. DOI: 10.1016/j.jhydrol.2019.124292
- Morin-Crini N., Scheifler R., Amiot C., Riols R., Coeurdassier M. (2020) Determination of polycyclic aromatic hydrocarbon (PAH) contents in micro-volumes of the whole blood and liver of Red Kite by a simplified GC-MS/MS method. *Int. J. Environ. Anal. Chem.* DOI: 10.1080/03067319.2020.1726899
- Morley S.A., Abele D., Barnes D.K.A., Cardenas C.A., Cotté C., Gutt J., Henley S.F., Hofer J., Hughes K.A., Martin S.M., Moffat C., Raphael M., Stammerjohn S., Suckling C., Tulloch V.J.D., Waller C.L. (2020) Global drivers on Southern Ocean ecosystems: changing physical environments in an Earth system. *Frontiers in Marine Science*, 7:547188. DOI: 10.3389/fmars.2020.547188
- Mousset E., Quackenbush L., Schondek C., Gerardin-Vergne A., Pontvianne S., Kmietek S., Pons M.N. (2020) Effect of homogeneous Fenton combined with electron transfer on the fate of inorganic chlorinated species in synthetic and reclaimed municipal wastewater, *Electrochimica Acta*, 334, 135608. DOI: 10.1016/j.electacta.2019.135608
- Munoz F., Fried G., Armangot A., Bourgeois B., Bretagnolle V., Chadoeuf J., Mahaut L., Plumejeaud C., Storkey J., Violle C., Gaba S. (2020) Ecological specialization and rarity of arable weeds: insights from a comprehensible survey in France. *Plants*, 9(7), 824. DOI: 10.3390/plants9070824
- Nachón D., Bareille G., Drouineau H., Tabouret H., Taverny C., Boisneau C., Berail S., Péchéyran C., Claverie F., Daverat F. (2020) 80's population-specific compositions of two related anadromous shad species during the oceanic phase determined by microchemistry of archived otoliths. *Can J Fisheries Aquatic Sciences*, 77(1). DOI: 10.1139/cjfas-2018-0444
- Nguyen Diep N., Grybos M., Rabiet M., Deluchat V. (2020) How do colloids separation and sediment storage methods affect water-mobilizable colloids and phosphorus? An insight into dam reservoir sediment. *Colloids and Surface: A: Physicochemical and Engineering Aspects*, 606, 125505. DOI: 10.1016/j.colsurfa.2020.125505
- Nicod C., Couval G., Giraudoux P., Gillet F. (2020) Vole disturbances and plant community diversity in a productive hay meadow. *Acta Oecol.-Int. J. Ecol.* 106, 103585. DOI: 10.1016/j.actao.2020.103585
- Nicolai A., Guernion M., Guillocheau S., Hoeffner K., Le Gouar P., Ménard N., Piscart C., Vallet D., Hervé, Morgane ET, Beneszeth E., (2020) Transdisciplinary Bioblitz: Rapid biotic and abiotic inventory allows studying environmental changes over 60 years at the Biological Field Station of Paimpol (Brittany, France) and opens new interdisciplinary research opportunities. *Biodiversity data journal*, 8, e50451. DOI: 10.3897/BDJ.8.e50451
- Offret C., Paulino S., Gauthier O., Château K., Bidault A., Corporeau C., Miner P., Petton B., Pernet F., Fabiou C., Paillard C., Blay G.L. (2020) The marine intertidal zone shapes oyster and clam digestive bacterial microbiota. *FEMS Microbiology Ecology* 96, fiaa078. DOI: 10.1093/femsec/fiaa078
- Olarinoye T., Gleeson T., Marx V., Seeger S., Adinehvand R., Allocca V., ..., Hartmann A. (2020) Global karst springs hydrograph dataset for research and management of the world's fastest-flowing groundwater. *Sci Data*, 7, 59. DOI: 10.1038/s41597-019-0346-5

- Olivier F., Gaillard B., Thébault J., Meziane T., Tremblay R., Dumont D., Bélanger S., Gosselin M., Jolivet A., Chauvaud L., Martel A.L., Rysgaard S., Olivier A.-H., Pettré J., Mars J., Gerber S., Archambault P. (2020) Shells of the bivalve *Astarte moerchi* give new evidence of a strong pelagic-benthic coupling shift occurring since the late 1970s in the North Water polynya. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 378, 20190353. DOI: 10.1098/rsta.2019.0353
- Ouisse T., Day E., Laville L., Hendrickx F., Convey P., Renault D. (2020) Effects of elevational range shift on the morphology and physiology of a carabid beetle invading the sub-Antarctic Kerguelen Islands. *Scientific Reports*, 10, 1234. DOI: 10.1038/s41598-020-57868-0
- 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
- Patin R., Etienne M.-P., Lebarbier E., Chamaillé-Jammes S., Benhamou S. (2020) Identifying stationary phases in multivariate time-series for highlighting behavioural modes and home range settlements. *Journal of Animal Ecology*, 89(1): 44–56. DOI: 10.1111/1365-2656.13105
- Patrick S. C., Corbeau A., Reale D., Weimerskirch H. (2020) Coordination in parental effort decreases with age in a long-lived seabird. *Oikos*, 129, 1763–1772. DOI: 10.1111/oik.07404
- 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
- Penaud A., Ganne A., Coste P.O., Herlédan M., Durand M., Mojtabid M., Nizou J., Toucanne S. (2020) A new midshelf record in the northern Bay of Biscay (NE Atlantic, CBT-CS11 core): Sedimentological, geochemical and palynological data over the last 7 kyrs. *Data in Brief*, 29, 105323. DOI: 10.1016/j.quascirev.2019.106135
- Penaud A., Ganne A., Eynaud F., Lambert C., Coste P.O., Herlédan M., Vidal M., Goslin J., Stéphan P., Charria G., Pailler Y., Durand M., Zumaque J., Mojtabid M., (2020) Oceanic versus continental influences over the last 7 kyrs from a mid-shelf record in the northern Bay of Biscay (NE Atlantic). *Quaternary Science Reviews*, 229, 106135. DOI: 10.1016/j.quascirev.2019.106135
- Pertierra L.R., Segovia N.I., Noll D., Martinez P.A., Pliscoff P., Barbosa A., Aragón P., Rey A.R., Pistorius P., Trathan P., Polanowski A., Bonadonna F., Le Bohec C., Bi K., Wang-Claypool C.Y., Gonzalez-Acuña D., Dantas G.P.M., Bowie R.C.K., Poulin E., Vianna J.A. (2020) Cryptic speciation in gentoo penguins is driven by geographic isolation and regional marine conditions: Unforeseen vulnerabilities to global change. *Diversity and Distributions*, 26(8), 958–975. DOI: 10.1111/ddi.13072
- Petton S., Pouvreau S., Dumas F. (2020) Intensive use of Lagrangian trajectories to quantify coastal area dispersion. *Ocean Dynamics*, 70, 541–559. DOI: 10.1007/s10236-019-01343-6

- Piégay H., Chabot A., Le Lay Y.-F. (2020) Some comments about resilience: From cyclicity to trajectory, a shift in living and nonliving system theory. *Geomorphology*, 367, 14. DOI: 10.1016/j.geomorph.2018.09.018
- Piégay H., Cottet M., Lamouroux N. (2020) Innovative approaches in river management and restoration. *River Research and Applications*, 36, 1056-1075. DOI: 10.1002/rra.3631
- Piel D., Bruto M., James A., Labreuche Y., Lambert C., Janicot A., Chenivesse S., Petton B., Wegner K. M., Stoudmann C., Blokesch M., Le Roux F. (2020) Selection of *Vibrio crassostreae* relies on a plasmid expressing a type 6 secretion system cytotoxic for host immune cells, *Environmental Microbiology*, DOI: 10.1111/1462-2920.14776
- Pilotto F., Kühn I., Adrian R. et al. (2020) Meta-analysis of multidecadal biodiversity trends in Europe. *Nat Commun*, 11, 3486. DOI: 10.1038/s41467-020-17171-y
- Pilotto F., Kühn I., Adrian R., Alber R., Alignier A., Andrews C., Bäck J., Barbaro L., Beaumont D., Beenarts N. (2020) Meta-analysis of multidecadal biodiversity trends in Europe. *Nature communications*, 11, 3486. DOI: 10.1038/s41467-020-17171-y
- Pinasseau L., Wiest L., Volatier L., Fones G.R., Mills G.A., Mermilliod-Blondin F., Vulliet E (2020) Calibration and field application of an innovative passive sampler for monitoring groundwater quality. *Talanta*, 208, 120307. DOI: 10.1016/j.talanta.2019.120307
- Pinasseau L., Wiest L., Volatier L., Mermilliod-Blondin F., Vulliet E. (2020) Emerging polar pollutants in groundwater: Potential impact of urban stormwater infiltration practices. *Environmental Pollution*, 266, 115387. DOI: 10.1016/j.envpol.2020.115387
- Plichard L., Forcellini M., Le Coarer Y., Capra H., Carrel G., Ecochard R., Lamouroux N. (2020) Predictive models of fish microhabitat selection in multiple sites accounting for abundance overdispersion. *River Research and Applications*, 36, 1056-1075. DOI: 10.1002/rra.3631
- Ponnou-Delaffon V., Probst A., Payre-Suc V., Granouillac F., Ferrant S., Perrin A., Probst J.L. (2020) Long and short-term trends of stream hydrochemistry and high frequency surveys as indicators of the influence of climate change, agricultural practices and inner processes (Aurade agricultural catchment, SW France). *Ecological Indicators*, 110, 105894. DOI: 10.1016/j.ecolind.2019.105894.
- Pons M.N., Louis P., Vignati D.A.L. (2020) Effect of lockdown on wastewater characteristics: a comparison of two large urban areas, *Water Science & Technology*, 82(12):2813-2822. DOI: 10.2166/wst.2020.520
- Powolny T., Bassin N., Crini N., Fourel I., Morin C., Pottinger T.G., Massemin S., Zahn S., Coeurdassier M. (2020) Corticosterone mediates telomere length in raptor chicks exposed to chemical mixture. *Sci. Total Environ.* 706, 135083. DOI: 10.1016/j.scitotenv.2019.135083
- Prado A., Requier F., Crauser D., Le Conte Y., Bretagnolle V., Alaux C. (2020) Honeybee lifespan: the critical role of pre-foraging stage. *Royal Society Open Science*, 7(11), 200998. DOI: 10.1098/rsos.200998
- Pretzsch H., M. Steckel M., Heym M., Biber P., Ammer C., Ehbrecht M., Bielak K., Bravo F., Ordóñez C., Collet C., Vast F., Droeßler L., Brazaitis G., Jansons A., Coll L., Löf M., Aldea J., Korboulewsky N., Reventlow D.O.J., Nothdurft A., Engel M., Pach M., Skrzyszewski J., Pardos M., Ponette Q., Sitko R., Fabrika M., Svoboda M., Černý J., Wolff B., Ruiz-Peinado R., del Río M. (2020) Stand

growth and structure of monospecific and mixed-species stands of Scots pine (*Pinus sylvestris* L.) and oak (*Q. robur* L., *Quercus petraea* (MATT.) LIEBL.) analysed along a productivity gradient through Europe. European Journal of Forest Research, 139, 349-367. DOI: 10.1007/s10342-019-01233-y

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

Quillfeldt P., Weimerskirch H., Delord K., Cherel Y. (2020) Niche switching and leapfrog foraging: movement ecology of sympatric petrels during the early breeding season. Movement Ecology, 8, 23. DOI: 10.1186/s40462-020-00212-y

Rapin A., Rabiet M., Mourier B., Grybos M., Deluchat V. (2020) Sedimentary phosphorus accumulation and distribution in the continuum of three cascade dams (Creuse River, France). Environmental Science and Pollution Research, 27, 6526-6539. DOI: 10.1007/s11356-019-07184-6

Reiminger N., Jurado X., Vazquez J., Wemmert C., Blond N., Dufresne M., Wertel J. (2020) Effects of wind speed and atmospheric stability on the air pollution reduction rate induced by noise barriers. Journal of Wind Engineering and Industrial Aerodynamics, 200, 104160. DOI: 10.1016/j.jweia.2020.104160

Reiminger, N., Jurado, X., Vazquez, J., Wemmert, C., Blond, N., Wertel, J., Dufresne, M. (2020) Methodologies to assess mean annual air pollution concentration combining numerical results and wind roses. Sustainable Cities and Society, 59, 102221. DOI: 10.1016/j.scs.2020.102221.

Reiminger, N., Vazquez, J., Blond, N., Dufresne, M., Wertel, J. (2020) CFD evaluation of mean pollutant concentration variations in step-down street canyons. Journal of Wind Engineering and Industrial Aerodynamics, 196, 104032. DOI: 10.1016/j.jweia.2019.104032

Renault D. (2020) A review of the phenotypic traits associated with insect dispersal polymorphism, and experimental designs for sorting out resident and disperser phenotypes. Insects, 11, 214. DOI: 10.3390/insects11040214

Renedo M., Bustamante P., Cherel Y., Pedrero Z., Tessier E., Amouroux D. (2020) A “seabird-eye” on mercury stable isotopes and cycling in the Southern Ocean. Science of the Total Environnement, 742, 140499. DOI: 10.1016/j.scitotenv.2020.140499

Requier F., Henry M., Decourtye A., Brun F., Aupinel P., Rebaudo F., Bretagnolle V. (2020) Measuring ontogenetic shifts in central-place foragers: a case study with honey bees. Journal of Animal Ecology, 89(8), 1860-1871. DOI: 10.1111/1365-2656.13248

Richard B., Bonté B., Barreteau O., Braud I. (2020) The abandonment of water daily slot and its operational consequences on collective irrigated systems. A situational multi-agent approach applied to a gravity-fed canal of Middle-Durance (France). La Houille Blanche - Revue internationale de l'eau, 43-55. DOI : 10.1051/lhb/2020033

Rinaud T., Harmange C., Pays O., Sarasa M., Saillard M., Bretagnolle V. (2020) Interspecific competition between two partridges in farmland landscapes. Animal Behaviour, 165, 23-34. DOI: 10.1016/j.anbehav.2020.04.018

- Robert A., Yengué J-L., Augis F., Motelica-Heino M., Hien E., Sanou A. (2020) L'agriculture urbaine à Ouagadougou (Burkina Faso), tiraillée entre le désir des citadins et l'action publique. Risco: Revista de Pesquisa em Arquitetura e Urbanismo, Universidade de São Paulo, 2020, Nature and City, 18 (2), 80-93.
- Robert, A. (2020) Réinterroger les paysages du quotidien en temps de confinement. Regard porté depuis le vignoble bourgueillois. L'information géographique, n° 3/2020 : « Confins », Armand Colin, p. 106-120. DOI : 10.3917/lig.843.0106.
- Robert, A., Tebonou, M. (2020) Le peuplier, un arbre qui cache la forêt ? La remise en cause de la place des peupleraies dans les paysages en Anjou et ses raisons. Projets de paysage, Projets de paysage, n° 22 | 2020. DOI : 10.4000/paysage.9121
- Rofes J., Cersoy S., Zazzo A., Royer A., Nicod P.-Y., Laroulandie V., Langlais M., Pailler Y., Leandri C., Leandri F., Lebon M., Tresset A. (2020) Detecting stratigraphical issues using direct radiocarbon dating from small-mammal remains. Journal of Quaternary Science, 35, 505–513. DOI: 10.1002/jqs.3193
- Ropert-Coudert Y., Van de Putte A., Reisinger R., Bornemann H., Charrassin J.B., Costa D.P., Danis B., Huckstadt L., Jonsen I., Lea M.A., Thompson D., Torres L., Trathan P., Wotherspoon S., Ainley D., Alderman R., Andrews-Goff V., Arthur B., Ballard G., Bengtson J., Bester M., Blix A.S., Boehme L., Bost C.A., Boveng P., Cleeland J., Constantine R., Crawford R., Dalla Rosa L., de Bruyn P.J.N., Delord K., Descamps S., Double M.C., Emmerson L., Fedak M., Friedlaender A., Gales N., Goebel M., Goetz K., Guinet C., Goldsworthy S., Harcourt R., Hinke J., Jerosch K., Kato A., Kerry K., Kirkwood R., Kooyman G., Kovacs K., Lawton K., Lowther A., Lydersen C., Lyver P., Makhado A., Márquez M., McDonald B., McMahon C., Muelbert M., Nachtsheim D., Nicholls K., Nordøy E., Olmastroni S., Phillips R., Pistorius P., Plötz J., Pütz K., Ratcliffe N., Ryan P., Santos M., Southwell C., Staniland I., Takahashi A., Tarroux A., Trivelpiece W., Wakefield E., Weimerskirch H., Wienecke B., Xavier J., Raymond B., Hindell M. (2020) The retrospective analysis of Antarctic tracking data project. Nature Scientific Data 7, 94. DOI: 10.1038/s41597-020-0406-x
- Rouifed S., Cottet M., de Battista M., Le Lay Y.F., Rateau P., Rivière-Honegger A., Piola F. (2020) Inefficiency of cutting stems once during the vegetative growth of Fallopia spp. Management of Biological Invasions. 11 (3), 399-405. DOI: 10.3391/mbi.2020.11.3.03
- Rozen-Rechels D., Valls-Fox H., Mabika C.T., Chamaillé-Jammes S. (2020) Temperature as a constraint on the timing and duration of African elephant foraging trips. Journal of Mammalogy, 101, 1670-1679. DOI: 10.1093/jmammal/gyaa129
- Rumiano F., Wielgus E., Miguel E., Chamaillé-Jammes S., Valls-Fox H., Cornélis D., de Garine-Wichatitsky M., Fritz H., Caron A., Tran A. (2020) Remote sensing of environmental drivers influencing the movement ecology of sympatric wild and domestic ungulates in semi-arid savannas, a review. Remote Sensing, 12, 3218. DOI: 10.3390/rs12193218
- Saclier N., P. Chardon, F. Malard, L. Konecny-Dupré, D. Eme, A. Bellec, V. Breton, L. Duret, T. Lefebvre, J. Christophe, J. Douady (2020) Bedrock radioactivity influences the rate and spectrum of mutation. eLife, 9, e56830. DOI: 10.7554/eLife.56830
- 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 A., J. Bleu, A. Boos, I. El Masoudi, P. Ronot, S. Zahn, M. Del Nero, S. Massemín (2020) Consequences of trace metal cocktail exposure in zebra finch (*Taeniopygia guttata*) and effect of calcium supplementation. *Ecotoxicology and Environmental Safety*, 193, 110357. DOI:10.1016/j.ecoenv.2020.110357
- 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
- Schmitt N., Colas S., Saurel N., Bassignot F., Vuillemin B., Groetz J.E. (2020) Detector-electrode for alpha spectrometry in water sample, numerical and early feasibility investigation toward thermocompression bonding assembly process. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 953,163270. DOI : 10.1016/j.nima.2019.163270
- Sergi S., Baudena A., Cotté C., Ardyna M., Blain S., d'Ovidio F. (2020) Interaction of the Antarctic Circumpolar Current with seamounts fuels moderate blooms but vast foraging grounds for multiple marine predators. *Frontiers in Marine Science*. 7, 416. DOI: 10.3389/fmars.2020.00416
- Serra A.A., Bittebière A.K., Mony C., Slimani K., Pallois F., Renault D., Couée I., Gouesbet G., Sulmon C. (2020) Local-scale dynamics of plant-pesticide interactions in a northern Brittany agricultural landscape. *Science of the Total Environment*, 744, 140772. DOI: 10.1016/j.scitotenv.2020.140772
- Shanafied M., Godsey S., Datry T., Hale R., Zipper S.C., Costigan K., Krabbenhoff C.A., Dodds W.K., Zimmer M., Allen D.C., Bogan M., Kaiser K.E., Burrows R.M., Hammond J.C., Bush M., Kampf S., Mims, M.C., Burgin AM., Olden J. (2020) Science gets up to speed on dry rivers. *EOS*, 101. DOI: 10.1029/2020EO139902
- Siano R., Chapelle A., Antoine V., Michel-Guillou E., Rigaut-Jalabert, F. Guillou, L. Hégaret H., Leynaert A., Curd A. (2020) Citizen participation in monitoring phytoplankton seawater discolorations. *Marine Policy*, 117, 103039. DOI: 10.1016/j.marpol.2018.01.022
- Somveille M., Dias M. P., Weimerskirch H., Davies T. E. (2020) Projected migrations of southern Indian Ocean albatrosses as a response to climate change. *Ecography*, 43, 1683-1691. DOI: 10.1111/ecog.05066
- Spor A., Camargo A., Bru D., Gaba S., Garmyn D., Gal L., Piveteau P. (2020) Habitat disturbances modulate the barrier effect of resident soil microbiota on *Listeria monocytogenes* invasion success. *Frontiers in Microbiology*, 11, 927. DOI: 10.3389/fmicb.2020.00927
- Steckel M., del Río M., Heym M., Aldea J., Bielak K., Brazaitis G., Černý J., Coll L., Collet C., Ehbrecht M., Jansons A., Nothdurft A., Pach M., Pardos M., Ponette Q., Reventlow D.O.J., Sitko R., Svoboda M., Vallet P., Wolff B., Pretzsch H., (2020) Species mixing reduces drought susceptibility of Scots pine (*Pinus sylvestris* L.) and oak (*Quercus robur* L., *Quercus petraea* (Matt.) Liebl.) – Site water supply and fertility modify the mixing effect. *For. Ecol. Manage.* 461, 117908. DOI : 10.1016/j.foreco.2020.117908
- Tarakini T., Mabika I., Dakwa F., Mundy P., Fritz H. (2020) Terrestrial threats dominate the waterbird landscape of fear in a savannah pan wetland system. *Wildlife Biology*, 2. DOI: 10.2981/wlb.00680

- Tarakini T., Mundy P., Fritz H. (2020) Trends in savannah waterbirds: protected area effect and influence of global threats on differing guilds. *Ostrich*, 91(2): 107-117. DOI : 10.2989/00306525.2020.1722972
- Tarroux A., Weimerskirch H., Wang S.-H., Bromwich D., Cherel Y., Kato A., Ropert-Coudert Y., Varpe O., Yoccoz N., Descamps S. (2016) Flexible flight response to challenging wind conditions in a commuting Antarctic seabird: do you catch the drift? *Animal Behaviour*, 113, 99-112. DOI: 10.1016/j.anbehav.2015.12.021
- Tena A., Piégay H., Seignemartin G., Barra A., Berger J.F., Mourier B., Winiarski T. (2020) Cumulative effects of channel correction and regulation on floodplain terrestrialisation patterns and connectivity. *Geomorphology*, 354, 107034. DOI: 10.1016/j.geomorph.2020.107034
- Touchart L., Bartout P. (2020) La masse d'eau : le détournement administratif d'un concept géographique. *Bulletin de la Société Géographique de Liège*, 74, 65-78. DOI : 10.25518/0770-7576.6026
- 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
- Trathan P. N., Wienecke B., Barbraud C., Jenouvrier S., Kooyman G., Le Bohec C., Ainley D. G., Ancel A., Zitterbart D. P., Chown S. L., LaRue M., Cristofari R., Younger J., Lucas G., Bost C.-A., Brown J. A., Gillett H. J., Fretwell P. T. (2020) The emperor penguin - Vulnerable to projected rates of warming and sea ice loss. *Biological Conservation*, 241: 108216. DOI: 10.1016/j.biocon.2019.108216
- 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
- Ulloa-Cedamanos F., Probst J.L., Binet S., Camboulive T., Payre-Suc V., Pautot C., Bakalowicz M., Beranger S., Probst A. (2020) A forty-year karstic critical zone survey (baget catchment, pyrenees-france): lithologic and hydroclimatic controls on seasonal and inter-annual variations of stream water chemical composition, pCO₂, and carbonate equilibrium. *Water*, 12, 1227. DOI: 10.3390/w12051227
- Urvoy M., Labry C., Delmas D., Creac'h L., L'Helguen S. (2020) Microbial enzymatic assays in environmental water samples: Impact of inner filter effect and substrate concentrations. *Limnol Oceanogr Methods*, 18(2), 725-738. DOI: 10.1002/lom3.10398
- Van de Vijver B., Scholberg P., Lebouvier M. (2020) *Pinnularia schoelynckiana*, a new limnoterrestrial diatom species (Bacillariophyta) from the sub-Antarctic Iles Kerguelen (southern Indian Ocean). *Botany Letters*, 167(1): 42-49. DOI: 10.1080/23818107.2019.1675185
- 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
- Vayssièvre A., Castanet C., Gautier E., Virmoux C., Dépret T., Gandouin E., Develle A.L., Mokadem F., Saulnier-Copard S., Sabatier P., Carcaud N. (2020) Readjustments of a sinuous river during the last 6000 years in northwestern Europe (Cher River, France): from an active meandering river

to a stable river course under human forcing. *Geomorphology* 370, 107395. DOI: 10.1016/j.geomorph.2020.107395

Vergne A., Le Coz J., Berni C., Pierrefeu G. (2020) Using a down-looking multi-frequency ABS for measuring suspended sediments in rivers. *Water Resources Research*, 56, e2019WR024877. DOI: 10.1029/2019WR024877

Vianna J.A., Fernandes F.A.N., Frugone M.J., Figueiró H.V., Pertierra L.R., Noll D., Bi K., Wang-Claypool C.Y., Lowther A., Parker P., Le Bohec C., Bonadonna F., Wienecke B., Pistorius P., Steinfurth A., Burridge C.P., Dantas G.P.M., Poulin E., Simison W.B., Henderson J., Eizirik E., Nery M.F., Bowie R.C.K. (2020) Genome-wide analyses reveal drivers of penguin diversification. *Proceedings of the National Academy of Sciences*, 36, 22303-22310. DOI: 10.1073/pnas.2006659117

Viblanc V. A., Schull Q., Stier A., Durand L., Lefol E., Robin J.-P., Zahn S., Bize P., Criscuolo F. (2020). Foster rather than biological parental telomere length predicts offspring survival and telomere length in king penguins. *Mol. Ecol.*, 29 (16) 3154-3166. DOI: 10.1111/mec.15485.

Villette P., Afonso E., Couval G., Levret A., Galan M., Goydadin A.-C., Cosson J.-F., Giraudoux P., (2020) Spatio-temporal trends in richness and persistence of bacterial communities in decline-phase water vole populations. *Sci Rep* 10, 9506. DOI: 10.1038/s41598-020-66107-5

Vitet C., Duncan P., Gimenez O., Mabika C., Chamaillé-Jammes S. (2020) Plains zebras living under predation risk provide evidence that dilution and detection effects may not always matter behaviourally and demographically. *Ecosphere*, 11(11): e03288. DOI : 10.1002/ecs2.3288.

Voisin J., Cournoyer B., Marjolet L., Vienney A., Mermilliod-Blondin F. (2020) Ecological assessment of groundwater ecosystems disturbed by recharge systems using organic matter quality, biofilm characteristics, and bacterial diversity. *Environ Sci Pollut Res*, 27, 3295–3308. DOI : 10.1007/s11356-019-06971-5

Wang J.-L., Alasonati E., Tharaud M., Gelabert A., Fisicaro 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

Weimerskirch H., Collet J., Corbeau A., Pajot A., Hoarau F., Marteau C., Filippi D., Patrick S. C. (2020) Ocean sentinel albatrosses locate illegal vessels and provide the first estimate of the extent of nondeclared fishing. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 117 (6), 3006-3014. DOI: 10.1073/pnas.1915499117

Wielgus E., Cornélis D., de Garine-Wichatitsky M., Cain B., Fritz H., Miguel E., Valls-Fox H., Caron A., Chamaillé-Jammes S. (2020) Are fission-fusion dynamics and their seasonal variations consistent among populations? A large-scale investigation with African buffalo (*Syncerus caffer caffer*). *Ecology & Evolution* 10:9240-9256. DOI: 10.1002/ece3.6608

Winterl A., Richter S., Houstin A., Nesterova A.P., Bonadonna F., Schneider W., Fabry B., Le Bohec C., Zitterbart D.P. (2020) MicrObs – A customizable time-lapse camera for ecological studies, *HardwareX*, 8, e00134. DOI: 10.1016/j.johx.2020.e00134

Wintermantel D., Odoux J-F., Decourtey A., Henry M., Allier F., Bretagnolle V. (2020) Neonicotinoid-induced mortality risk for bees foraging on oilseed rape nectar persists despite EU moratorium. *Science of the Total Environment*. 704: 135400. DOI: 10.1016/j.scitotenv.2019.135400

Woegerbauer M., Bellanger X., Merlin C. (2020) Cell-Free DNA: An underestimated source of antibiotic resistance gene dissemination at the interface between human activities and downstream environments in the context of wastewater reuse. *Frontiers in Microbiology* 11: 671. DOI: 10.3389/fmicb.2020.00671

Youssoufi S., Houot H., Vuidel G., Pujol S., Mauny F., Foltete J.-C. (2020) Combining visual and noise characteristics of a neighborhood environment to model residential satisfaction: An application using GIS-based metrics. *Landsc. Urban Plan.* 204, 103932. DOI: 10.1016/j.landurbplan.2020.103932

Zimmer M., Kaiser K., Blaszczak J., Zipper S., Hammond J., Fritz K., Costigan K., Hosen J., Godsey S., Allen G., Kampf S., Burrows R., Krabbenhoft C., Dodds W., Hale R., Olden J., Shanafield M., DelVecchia A., Ward A., Mims M., Datry T., Bogan M., Boersma K., Busch M., Jones C.N., Burgin A., Allen D. (2020) Zero or not? Causes and consequences of zero-flow stream gage readings. *Wiley Interdisciplinary Reviews: Water*, 7. DOI: 10.1002/wat2.1436