# Sonja C. Jhnig

## List of Publications by Citations



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| 91 papers | 2,984 citations | 31 h-index | 52 g-index |
| 110 ext. papers | 3,877 ext. citations | 5 avg, IF | 5.36 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 91 | The role of the uplift of the Qinghai-Tibetan Plateau for the evolution of Tibetan biotas. *Biological Reviews*, **2015**, 90, 236-53 | 13.5 | 369 |
| 90 | River restoration success: a question of perception **2011**, 21, 2007-15 | | 135 |
| 89 | Climate-change winners and losers: stream macroinvertebrates of a submontane region in Central Europe. *Freshwater Biology*, **2011**, 56, 2009-2020 | 3.1 | 132 |
| 88 | Modelling distribution in European stream macroinvertebrates under future climates. *Global Change Biology*, **2013**, 19, 752-62 | 11.4 | 128 |
| 87 | The impact of hydromorphological restoration on river ecological status: a comparison of fish, benthic invertebrates, and macrophytes. *Hydrobiologia*, **2013**, 704, 475-488 | 2.4 | 128 |
| 86 | A comparative analysis of restoration measures and their effects on hydromorphology and benthic invertebrates in 26 central and southern European rivers. *Journal of Applied Ecology*, **2010**, 47, 671-680 | 5.8 | 119 |
| 85 | The Alliance for Freshwater Life: A global call to unite efforts for freshwater biodiversity science and conservation. *Aquatic Conservation: Marine and Freshwater Ecosystems*, **2018**, 28, 1015-1022 | 2.6 | 106 |
| 84 | Dispersal as a limiting factor in the colonization of restored mountain streams by plants and macroinvertebrates. *Journal of Applied Ecology*, **2011**, 48, 1241-1250 | 5.8 | 81 |
| 83 | Effects of re-braiding measures on hydromorphology, floodplain vegetation, ground beetles and benthic invertebrates in mountain rivers. *Journal of Applied Ecology*, **2009**, 46, 406-416 | 5.8 | 76 |
| 82 | The global decline of freshwater megafauna. *Global Change Biology*, **2019**, 25, 3883-3892 | 11.4 | 72 |
| 81 | Limiting factors and thresholds for macroinvertebrate assemblages in European rivers: Empirical evidence from three datasets on water quality, catchment urbanization, and river restoration. *Ecological Indicators*, **2012**, 18, 63-72 | 5.8 | 71 |
| 80 | Contrasting metacommunity structure and beta diversity in an aquatic-floodplain system. *Oikos*, **2016**, 125, 686-697 | 4 | 67 |
| 79 | Context dependency in biodiversity patterns of central German stream metacommunities. *Freshwater Biology*, **2016**, 61, 607-620 | 3.1 | 67 |
| 78 | Re-meandering German lowland streams: qualitative and quantitative effects of restoration measures on hydromorphology and macroinvertebrates. *Environmental Management*, **2009**, 44, 745-54 | 3.1 | 59 |
| 77 | Integrating catchment properties in small scale species distribution models of stream macroinvertebrates. *Ecological Modelling*, **2014**, 277, 77-86 | 3 | 56 |
| 76 | Application of species distribution models in stream ecosystems: the challenges of spatial and temporal scale, environmental predictors and species occurrence data. *Fundamental and Applied Limnology*, **2015**, 186, 45-61 | 1.9 | 55 |
| 75 | An attack on two fronts: predicting how changes in land use and climate affect the distribution of stream macroinvertebrates. *Freshwater Biology*, **2015**, 60, 1443-1458 | 3.1 | 51 |

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| 74 | Substrate-specific macroinvertebrate diversity patterns following stream restoration. *Aquatic Sciences*, **2008**, 70, 292-303 | 2.5 | 49 |
| 73 | The three Rs of river ecosystem resilience: Resources, recruitment, and refugia. *River Research and Applications*, **2019**, 35, 107-120 | 2.3 | 48 |
| 72 | Flagship umbrella species needed for the conservation of overlooked aquatic biodiversity. *Conservation Biology*, **2017**, 31, 481-485 | 6 | 44 |
| 71 | Choice of study area and predictors affect habitat suitability projections, but not the performance of species distribution models of stream biota. *Ecological Modelling*, **2013**, 257, 1-10 | 3 | 44 |
| 70 | Freshwater Megafauna: Flagships for Freshwater Biodiversity under Threat. *BioScience*, **2017**, 67, 919-927 | 3.7 | 42 |
| 69 | Metacommunity structuring in Himalayan streams over large elevational gradients: the role of dispersal routes and niche characteristics. *Journal of Biogeography*, **2017**, 44, 62-74 | 4.1 | 41 |
| 68 | Modelling of riverine ecosystems by integrating models: conceptual approach, a case study and research agenda. *Journal of Biogeography*, **2012**, 39, 2253-2263 | 4.1 | 40 |
| 67 | Future large hydropower dams impact global freshwater megafauna. *Scientific Reports*, **2019**, 9, 18531 | 4.9 | 40 |
| 66 | Hydromorphological parameters indicating differences between single- and multiple-channel mountain rivers in Germany, in relation to their modification and recovery. *Aquatic Conservation: Marine and Freshwater Ecosystems*, **2008**, 18, 1200-1216 | 2.6 | 39 |
| 65 | Disappearing giants: a review of threats to freshwater megafauna. *Wiley Interdisciplinary Reviews: Water*, **2017**, 4, e1208 | 5.7 | 38 |
| 64 | Substratum associations of benthic invertebrates in lowland and mountain streams. *Ecological Indicators*, **2013**, 30, 178-189 | 5.8 | 37 |
| 63 | Mountain river restoration measures and their success(ion): Effects on river morphology, local species pool, and functional composition of three organism groups. *Ecological Indicators*, **2014**, 38, 243-255 | 5.8 | 36 |
| 62 | Freshwater megafauna diversity: Patterns, status and threats. *Diversity and Distributions*, **2018**, 24, 1395-1404 | 5 | 35 |
| 61 | Restoration effort, habitat mosaics, and macroinvertebrates  does channel form determine community composition?. *Aquatic Conservation: Marine and Freshwater Ecosystems*, **2009**, 19, 157-169 | 2.6 | 35 |
| 60 | Impacts of land use changes on hydrological components and macroinvertebrate distributions in the Poyang lake area. *Ecohydrology*, **2015**, 8, 1119-1136 | 2.5 | 27 |
| 59 | Environmental Controls on River Assemblages at the Regional Scale: An Application of the Elements of Metacommunity Structure Framework. *PLoS ONE*, **2015**, 10, e0135450 | 3.7 | 27 |
| 58 | Safeguarding freshwater life beyond 2020: Recommendations for the new global biodiversity framework from the European experience. *Conservation Letters*, **2021**, 14, e12771 | 6.9 | 27 |
| 57 | Quantitative hydrological preferences of benthic stream invertebrates in Germany. *Ecological Indicators*, **2017**, 79, 163-172 | 5.8 | 26 |

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| 56 | Climate change impacts on ecologically relevant hydrological indicators in three catchments in three European ecoregions. *Ecological Engineering*, **2019**, 127, 404-416 | 3.9 | 25 |
| 55 | Improving hydrological model optimization for riverine species. *Ecological Indicators*, **2017**, 80, 376-385 | 5.8 | 23 |
| 54 | Elements of metacommunity structure of river and riparian assemblages: Communities, taxonomic groups and deconstructed trait groups. *Ecological Complexity*, **2016**, 25, 35-43 | 2.6 | 23 |
| 53 | Projected effects of Climate-change-induced flow alterations on stream macroinvertebrate abundances. *Ecology and Evolution*, **2018**, 8, 3393-3409 | 2.8 | 22 |
| 52 | The Freshwater Information Platform: a global online network providing data, tools and resources for science and policy support. *Hydrobiologia*, **2019**, 838, 1-11 | 2.4 | 18 |
| 51 | The climate sensitive zone along an altitudinal gradient in central Himalayan rivers: a useful concept to monitor climate change impacts in mountain regions. *Climatic Change*, **2015**, 132, 265-278 | 4.5 | 18 |
| 50 | Climatic and Catchment-Scale Predictors of Chinese Stream Insect Richness Differ between Taxonomic Groups. *PLoS ONE*, **2015**, 10, e0123250 | 3.7 | 17 |
| 49 | Relation between floodplain land use and river hydromorphology on different spatial scales a case study from two lower-mountain catchments in Germany. *Fundamental and Applied Limnology*, **2009**, 174, 63-73 | 1.9 | 16 |
| 48 | Combining eight research areas to foster the uptake of ecosystem-based management in fresh waters. *Aquatic Conservation: Marine and Freshwater Ecosystems*, **2019**, 29, 1161-1173 | 2.6 | 15 |
| 47 | Using streamflow observations to estimate the impact of hydrological regimes and anthropogenic water use on European stream macroinvertebrate occurrences. *Ecohydrology*, **2017**, 10, e1895 | 2.5 | 15 |
| 46 | Spatially explicit species distribution models: A missed opportunity in conservation planning?. *Diversity and Distributions*, **2019**, 25, 758-769 | 5 | 15 |
| 45 | Anthropogenic land-use stress alters community concordance at the river-riparian interface. *Ecological Indicators*, **2016**, 65, 133-141 | 5.8 | 14 |
| 44 | Current and future latitudinal gradients in stream macroinvertebrate richness across North America. *Freshwater Science*, **2014**, 33, 1136-1147 | 2 | 14 |
| 43 | Rethinking megafauna. *Proceedings of the Royal Society B: Biological Sciences*, **2020**, 287, 20192643 | 4.4 | 13 |
| 42 | The Rise of Riverine Flow-ecology and Environmental Flow Research. *Environmental Processes*, **2014** , 1, 323-330 | 2.8 | 13 |
| 41 | River water quality assessment in selected Yangtze tributaries: Background and method development. *Journal of Earth Science (Wuhan, China)*, **2010**, 21, 876-881 | 2.2 | 13 |
| 40 | Social equity shapes zone-selection: Balancing aquatic biodiversity conservation and ecosystem services delivery in the transboundary Danube River Basin. *Science of the Total Environment*, **2019**, 656, 797-807 | 10.2 | 13 |
| 39 | A comparison of habitat diversity and interannual habitat dynamics in actively and passively restored mountain rivers of Germany. *Hydrobiologia*, **2013**, 712, 89-104 | 2.4 | 12 |

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| 38 | Expanding conservation culturomics and iEcology from terrestrial to aquatic realms. *PLoS Biology*, **2020**, 18, e3000935 | 9.7 | 12 |
| 37 | Elevation, aspect, and local environment jointly determine diatom and macroinvertebrate diversity in the Cangshan Mountain, Southwest China. *Ecological Indicators*, **2020**, 108, 105618 | 5.8 | 12 |
| 36 | A new model linking macroinvertebrate assemblages to habitat composition in rivers: development, sensitivity and univariate application. *Fundamental and Applied Limnology*, **2015**, 186, 117-133 | 1.9 | 11 |
| 35 | Characterizing macroinvertebrate communities across China: Large-scale implementation of a self-organizing map. *Ecological Indicators*, **2012**, 23, 394-401 | 5.8 | 11 |
| 34 | Twenty-five essential research questions to inform the protection and restoration of freshwater biodiversity. *Aquatic Conservation: Marine and Freshwater Ecosystems*, **2021**, 31, 2632-2653 | 2.6 | 11 |
| 33 | Exceptional body size-extinction risk relations shed new light on the freshwater biodiversity crisis. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E10263-E10264 | 11.5 | 10 |
| 32 | Environmental and spatial characterisation of an unknown fauna using DNA sequencing an example with Himalayan Hydropsychidae (Insecta: Trichoptera). *Freshwater Biology*, **2016**, 61, 1905-1920 | 3.1 | 9 |
| 31 | Climate Change and the Hydrology and Morphology of Freshwater Ecosystems **2010**, 65-83 | | 9 |
| 30 | A high-resolution streamflow and hydrological metrics dataset for ecological modeling using a regression model. *Scientific Data*, **2018**, 5, 180224 | 8.2 | 9 |
| 29 | Latitudinal patterns and large-scale environmental determinants of stream insect richness across Europe. *Limnologica*, **2015**, 55, 33-43 | 2 | 8 |
| 28 | A meeting framework for inclusive and sustainable science. *Nature Ecology and Evolution*, **2020**, 4, 668-671 | 11.3 | 7 |
| 27 | Introducing the H2020 AQUACROSS project: Knowledge, Assessment, and Management for AQUAtic Biodiversity and Ecosystem Services aCROSS EU policies. *Science of the Total Environment*, **2019**, 652, 320-329 | 10.2 | 7 |
| 26 | Combined effects of life-history traits and human impact on extinction risk of freshwater megafauna. *Conservation Biology*, **2021**, 35, 643-653 | 6 | 7 |
| 25 | When is a hydrological model sufficiently calibrated to depict flow preferences of riverine species?. *Ecohydrology*, **2020**, 13, e2193 | 2.5 | 6 |
| 24 | A global agenda for advancing freshwater biodiversity research. *Ecology Letters*, **2021**, | 10 | 6 |
| 23 | Streamflow-based evaluation of climate model sub-selection methods. *Climatic Change*, **2020**, 163, 1267-1285 | 4.3 | 6 |
| 22 | Revisiting global trends in freshwater insect biodiversity. *Wiley Interdisciplinary Reviews: Water*, **2021**, 8, e1506 | 5.7 | 6 |
| 21 | Molecular association and morphological characterisation of larval types (Trichoptera, Rhyacophilidae). *ZooKeys*, **2018**, 79-108 | 1.2 | 5 |

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| 20 | On the use of multicriteria decision analysis to formally integrate community values into ecosystem-based freshwater management. *River Research and Applications*, **2019**, 35, 1666-1676 | 2.3 | 5 |
| 19 | SMART Research: Toward Interdisciplinary River Science in Europe. *Frontiers in Environmental Science*, **2020**, 8, | 4.8 | 4 |
| 18 | Community□environment relationships of riverine invertebrate communities in central Chinese streams. *Environmental Earth Sciences*, **2015**, 74, 6431-6442 | 2.9 | 4 |
| 17 | Impacts of loss of free-flowing rivers on global freshwater megafauna. *Biological Conservation*, **2021**, 263, 109335 | 6.2 | 4 |
| 16 | Modelling spatial distribution of surface runoff and sediment yield in a Chinese river basin without continuous sediment monitoring. *Hydrological Sciences Journal*, **2015**, 1-24 | 3.5 | 3 |
| 15 | From topography to hydrology-The modifiable area unit problem impacts freshwater species distribution models. *Ecology and Evolution*, **2020**, 10, 2956-2968 | 2.8 | 3 |
| 14 | Put freshwater megafauna on the table before they are eaten to extinction. *Conservation Letters*, **2019**, 12, e12662 | 6.9 | 3 |
| 13 | Identifying and applying an optimum set of environmental variables in species distribution models. *Inland Waters*, **2020**, 10, 11-28 | 2.4 | 3 |
| 12 | Variation in macroinvertebrate community structure of functional process zones along the river continuum: New elements for the interpretation of the river ecosystem synthesis. *River Research and Applications*, **2021**, 37, 665-674 | 2.3 | 3 |
| 11 | Increased sediment deposition triggered by climate change impacts freshwater pearl mussel habitats and metapopulations. *Journal of Applied Ecology*, **2021**, 58, 1933-1944 | 5.8 | 3 |
| 10 | Molecular phylogeny of Himalopsyche (Trichoptera, Rhyacophilidae). *Systematic Entomology*, **2019**, 44, 973-984 | 3.4 | 2 |
| 9 | Climate model variability leads to uncertain predictions of the future abundance of stream macroinvertebrates. *Scientific Reports*, **2020**, 10, 2520 | 4.9 | 2 |
| 8 | Severity Multipliers as a Methodology to Explore Potential Effects of Climate Change on Stream Bioassessment Programs. *Water (Switzerland)*, **2017**, 9, 188 | 3 | 2 |
| 7 | Safeguarding Freshwater Life Beyond 2020: Recommendations for the New Global Biodiversity Framework from the European Experience | | 2 |
| 6 | More exposure opportunities for promoting freshwater conservation. *Aquatic Conservation: Marine and Freshwater Ecosystems*, **2021**, 31, 3626 | 2.6 | 2 |
| 5 | Benthic Macroinvertebrates as Indicators for River Health in Changjiang Basin. *Terrestrial Environmental Sciences*, **2019**, 207-217 | 0.1 | 2 |
| 4 | Metacommunity Structures of Macroinvertebrates and Diatoms in High Mountain Streams, Yunnan, China. *Frontiers in Ecology and Evolution*, **2020**, 8, | 3.7 | 2 |
| 3 | A Global Agenda for Advancing Freshwater Biodiversity Research | | 2 |

2 Introduction to European rivers **2022**, 1-26

1 Disentangling the effect of climatic and hydrological predictor variables on benthic macroinvertebrate distributions from predictive models. *Hydrobiologia*, **2022**, 849, 1021-1040 2.4