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## Assessing global regionalized impacts of eutrophication on freshwater fish biodiversity

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我的爸爸是一个非常温柔且努力的人，我的妈妈是一个坚强又独立的女性。他们是我的榜样，不仅教会了我做人的道理，而且对我关爱有加。在我眼里，他们是这个世界上最伟大的人，也是我最重要的人。我的父母一直支持我每一个选择，包括我远赴荷兰求学深造。在这个世界上，我还有一位重要的人，不仅是我的合作伙伴，也是我十年的伴侣，是我的阳光，水和空气。我最大的愿望就是希望你们能一生平安幸福，健康长寿，能在这个充满了不确定的、美丽又危险的世界里，能更长久地陪伴我。我偶尔脾气不好，突然对你们发脾气，有时候是因为压力大，有时也是莫名其妙一时上头的情绪，感谢你们一直包容我，给我宽容和充满爱的环境。我希望我自己能尽最大的能力对你们好，也让你们感受到爱，同时，也用从你们身上学会的爱和温柔以及我的知识去帮助这个世界上更多不相识的人。

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## Curriculum vitae

Jinhui Zhou was born on 16<sup>th</sup> October 1992 in Changsha, China. She started to study hydrological modeling in 2013 and finished her BSc thesis with the title of *Simulation and evaluation of water resources in Dongshaoxi watershed*. She got a BSc in Engineering in Water Resources and Hydropower at Wuhan University in 2014. She continued the study of hydrological models during her MSc, finished the thesis of *Analysis of extreme rainfall and flood response under climate change in Liujiang river basin*, and got an MSc in Hydrology and Water Resources at Sun Yat-Sen University in June 2016. From 2016 to 2019, she worked as an engineer and researcher in environmental sciences, particularly, nutrient modeling.

In 2019, she started her PhD research on eutrophication's impact on global ecosystems at the Institute of Environmental Sciences (CML), Leiden University. She is supervised by Peter van Bodegom, José Mogollón, Laura Scherer, and Arthur Beusen.

## List of publications

**Zhou, J.**, Mogollón, J. M., van Bodegom, P. M., Beusen, A. H. W., & Scherer, L. (2024). Global regionalized characterization factors for phosphorus and nitrogen impacts on freshwater fish biodiversity. *Science of The Total Environment*. 912, 169108. <https://doi.org/10.1016/j.scitotenv.2023.169108>.

**Zhou, J.**, Mogollón, J. M., van Bodegom, P. M., Barbarossa, V., Beusen, A. H. W., & Scherer, L. (2023). Effects of nitrogen emissions on fish species richness across the world's freshwater ecoregions. *Environmental Science & Technology*. <https://doi.org/10.1021/acs.est.2c09333>

**Zhou, J.**, Scherer, L., Bodegom, P. M. van, Beusen, A. H. W., & Mogollón, J. M. (2022). A Comparison Between Global Nutrient Retention Models for Freshwater Systems. *Frontiers in Water*, 4. <https://doi.org/10.3389/frwa.2022.894604>

**Zhou, J.**, Scherer, L., van Bodegom, P. M., Beusen, A. H. W., Mogollón, J.M. (2022). Regionalized nitrogen fate in freshwater systems on a global scale. *Journal of Industrial Ecology*, 26(3), 907–922. <https://doi.org/10.1111/jiec.13227>

### Under review/In preparation

**Zhou, J.**, Mogollón, J. M., & van Bodegom, P. M. (2023). Assessing nutrient fate from terrestrial to freshwater systems using a semi-distributed model for the Fuxian Lake Basin, China. [Under review].

Verones, F., Barbarossa, V., Boulay, A.-M., Corella-Puertas, E., Dorber, M., Douziech, M., Golsteijn, L., Hélias, A., Henderson, A., Kuipers, K., Lebrun, M., Link, A., Marques, A., Michelsen, O., Niblick, B., Pierrat, E., Pfister, S., Posthuma, L., Rosa, F., ... **Zhou, J.** (2023). A Global Consensus Life Cycle Impact Assessment Method - GLAM: Ecosystem Quality. [In preparation].

Zhuang, Y., Liu, X., **Zhou, J.**, Sheng, H., Yuan, Z., Zengwei Y. (2023). Connecting phosphorus emissions with freshwater eutrophication potential using improved environmental fate factors based on existing methods. [In preparation].

## **Presentations**

**Oral presentation** at 11th International Conference on Industrial Ecology (ISIE2023), 2nd-5th July 2023. Special Session: "Biodiversity Loss and Impact Indicators".

**Oral presentation** at virtual UNEP GLAM expert workshop on ecosystem quality impacts related to marine and freshwater eutrophication, 23rd-26th May 2023. Online. Session: "Freshwater eutrophication impact category".

**Oral presentation** at Nederlands Aardwetenschappelijk Congres (NAC), 23rd-24th March 2023. Utrecht, the Netherlands. Session: "Human Impacts on the Biosphere".

**Oral presentation** at the XXI International Nitrogen Workshop (NWorkshop), 24th-28th October 2022. Madrid, Spain. Session: "Agro-Food system".

**Oral presentation** at Nederlands Aardwetenschappelijk Congres (NAC), 5th-6th September 2022. Utrecht, the Netherlands. Session: "Hydrological Sciences".

**Poster presentation** at the 8th Global Nitrogen Conference (INI2021), 30th May - 3rd June 2021. Online. Session: "4b. Threats for aquat. Biodiversity"