

ZHIMIN YANG [杨志敏]

Email: yangzm@mail.bnu.edu.cn

Research Website: yzm0518.netlify.app

Tel: +86 18813185182 **Birthdate:** May 18, 1999

Address: No.19, Xijiekouwai St, Haidian District, Beijing, 100875, P.R.China

PROFESSIONAL SUMMARY

Research Interest

Hydrologic Cycle, Carbon Cycle, Ecosystem Ecology, Plant Eco-physiology, Climate Change

Professional Competence

ArcGIS, R, MATLAB, Remote Sensing, Hydrological Modeling, SPSS

EDUCATION & ACADEMIC PERFORMANCE

Master of Hydrology and Water Resources

Beijing Normal University, Beijing, China

GPA: 3.80/4.00

Rank: 1st out of 96 students (Top 1%)

Sept. 2021–Jun. 2024

Thesis: Research on the characteristics of greenhouse gas emissions in the upper Yellow River basin and their potential association with dissolved organic matter composition

Main courses:

Application and Development of Spatial Analysis Technology in Environment: A+ (Score: 96/100)

Water Quality Model and Simulation: A+ (Score: 96/100)

Science of Hydrology and Water Resources: A (Score: 94/100) Environmental Forensics: A (Score: 94/100)

Comparison of Environmental Issues between China and America: A+ (Score: 95/100)

Bachelor of Geographical Science

Hunan Normal University, Changsha, China

GPA: 4.25/5.00

Rank: 1st out of 84 students (Top 1%)

Sept. 2017–Jun. 2021

Thesis: Runoff and sediment yield process of two typical herbs on red soil slope under simulated rainfall

Main courses:

Meteorology and Climatology: A+ (Score: 95/100)

Soil Geography: A+ (Score: 95/100)

Geology and Geomorphology: A+ (Score: 95/100)

Economic Geography: A (Score: 94/100)

Phytogeography: A (Score: 91/100)

Professional English: A+ (Score: 97/100)

Language: Chinese, English

TOEFL iBT: 98 (MyBest Scores: 102)

JOURNAL ARTICLES

Yang, Z., Li, C., Liu, Y., Duan, J., Zhang, L., Li, Z., Zhou, X., Li, Q., Ma, Y., Tian, L., 2023. Roles of the stolon and erect grass species in surface–subsurface flow generation and red soil loss. **Journal of Hydrology**, 617, 128827. <https://doi.org/10.1016/j.jhydrol.2022.128827>

Yang, Z., Bu, J., Li, Z., Li, C., Yi, Y., Wang, X., Liu, Q., 2023. A novel index-based method associated with aquatic ecosystem for evaluating river longitudinal connectivity: A case study for cascade dams in the Yalong River, China. **Ecological Indicators**, 154, 110903. <https://doi.org/10.1016/j.ecolind.2023.110903>

Yang, Z., Li, C., Chen, H., Shan, X., Chen, J., Zhang, J., Liu, S., Liu, Q., Wang, X., 2023. Source-oriented ecological and resistome risks associated with geochemical enrichment of heavy metals in river sediments. **Chemosphere**, 336, 139119. <https://doi.org/10.1016/j.chemosphere.2023.139119>

Yang, Z., Li, X., Li, C., Pu, Z., Hu, J., Wang, X., Liu, Q., Yi, Y. 2024. An integrated framework for water assimilative capacity allocation based on environmental fairness-efficiency tradeoffs with a modified optimization model in a river basin. **Environmental Modelling & Software**. (In Press)

<https://doi.org/10.1016/j.envsoft.2025.106503>

- Yang, Z.**, Han, L., Liu, Q., Li, C., Pan, Z., Xu, K., 2022. Spatial and temporal changes in wetland in Dongting Lake Basin of China under long time series from 1990 to 2020. **Sustainability**, 14(6), 3620. <https://doi.org/10.3390/su14063620>
- Yang, Z.**, Yan, X., Tian, Y., Pu, Z., Wang, Y., Li, C., Yi, Y., Wang, X., Liu, Q., 2023. Risk assessment of sudden water pollution accidents associated with dangerous goods transportation on the cross-tributary bridges of Baiyangdian Lake. **Water**, 15(16), 2993. <https://doi.org/10.3390/w15162993>
- Li, C., **Yang, Z.**, Zhou X., Liu, L., Liu, L., Wang, X., Yi Y., Liu, Q. 2024. A review of the global water resources under climate and land use changes in the past thirty years of research. *Earth's Future*. (**Under Review**, Submission ID: 2024EF005837)
- Liu, Y., Ma, Y., Li, T., Xiao, P., Long, Y., Lei, M., **Yang, Z.**, Duan, J., Nie, X., Li, Z., 2025. Regulation mechanism of stolon and erect grass on surface–subsurface flow coupled erosion. **Journal of Hydrology**. 650, 132499. <https://doi.org/10.1016/j.jhydrol.2024.132499>

RESEARCH EXPERIENCES

- ❖ National Project: The Open Fund of the State Key Laboratory of Remote Sensing Science (No. 12800-310430011), Project Leader, May 2022–December 2023.
- ❖ The First Conference on World Geography—Oral Presentation: A Review of Research Progress on Water Resources Under Global Climate Change and Land Use Change, November 2022.
- ❖ Summer School Course: Theory and Methods of Land Surface Remote Sensing Inversion, Beijing Normal University, 2022.
- ❖ Summer School Course: Frontiers of Geography—Carbon Neutrality and Climate Change, Peking University, 2023.
- ❖ The 18th National Graduate Students Environment Forum—Oral Presentation: Combining PMF and Unmix Models for Characterizing Source-Specific Ecological Risks of Heavy Metals in Plain River Sediments, May 2023.
- ❖ The 6th River and Lake Ecological Forum—Oral presentation: Evaluation and Source Apportionment of Heavy Metal Pollution in Plain River Sediments, May 2022.
- ❖ Provincial Innovation and Entrepreneurship Project: The Spatiotemporal Change Characteristics and Driving Mechanisms of Wetlands in the Dongting Lake Basin, 2020.

SELECTED HONORS AND AWARDS

- ❖ Baosteel Scholarship, 2023 (Top 0.002% nationwide, 500 annual awards for PhD/master's/undergraduates students in China)
- ❖ National Scholarship, 2023 (Top 0.4% nationwide, 12,000 annual recipients in China)
- ❖ First-Class Scholarship, Beijing Normal University, 2023, 2022 (Rank No.1 in major, GPA: 3.80/4.00)
- ❖ Bronze Award, the 5th China Universities Geography Science Exhibition Competition (Top 30% nationally), South China, Team Leader, 2021
- ❖ Outstanding Graduate of Hunan Province, 2021 (Top 1% of Hunan Province)
- ❖ National College Student Summer Practice Team Award (Top 100), Associate Team Leader, 2019
- ❖ Top 100 Practice Teams, the 5th Search for National College Students' Summer Practice Teams, 2019
- ❖ Second Prize, the 10th National Olympic English Essay Contest, 2015 (Top 0.5%–2% nationwide)
- ❖ First Prize, the 9th National "Earth Little Doctor" Geographic Science Popularization Knowledge Contest, 2015 (Top 0.5%–1% nationwide)

INFORMATION FOR REFEREES

Referee 1

Academic Affiliation:

Professor **Chunhui Li**, PhD

School of Environment, Beijing Normal University

Email: chunhuili@bnu.edu.cn

Phone: (+86) 13691404007

Relationship with applicant:

Graduate Supervisor during 2021–2024 [Master's Project]

Co-author of 6 peer-reviewed papers

Referee 2

Academic Affiliation:

Associate Professor **Haiyang Chen**, PhD

College of Water Sciences, Beijing Normal University

Email: chen.haiyang@bnu.edu.cn

Phone: +86 13911651987

Relationship with applicant:

Research Advisor and Course Instructor during 2021–2024 [Master's Project]

Co-author and corresponding author of 1 peer-reviewed paper

Instructor for the specialized course *Environmental Forensics*