Complete list of publications of Shuang Song

Shuang Song

October 18, 2025

A) Publications with peer review process

2025 [1] Hou, Y., Wang, S., **Song, S.**, Chen, P., and Wu, X. (2025). "Crop irrigation water requirements mismatch the actual water allocation in the anthropogenic-regulated Yellow River Basin". en-US. In: *Journal of Hydrology: Regional Studies* 61, p. 102715. DOI: 10.1016/j.ejrh.2025.102715.

[2] Sang, S., Li, Y., Zong, S., Yu, L., Wang, S., Liu, Y., Wu, X., **Song, S.**, Wang, X., and Fu, B. (2025). "The modeling framework of the coupled human and natural systems in the Yellow River Basin". In: *Geography and Sustainability* 6.4, p. 100294. DOI: 10.1016/j.geosus.2025.100294.

[3] Wang, S., **Song, S.**, Liu, Y., Wu, X., Jiang, E., and Fu, B. (2025). "Scientifically improving integrated water governance for resilient flow of the Yellow River". en-US. In: *Bulletin of Chinese Academy of Sciences* 40.8, pp. 1347–1356. DOI: 10.3724/j.issn.1000-3045.20241224001.

[4] Wang, S., **Song, S.**, Zhang, H., Yu, L., Jiao, C., Li, C., Wu, X., Zhao, W., Best, J., Roberts, P., and Fu, B. (2025). "Anthropogenic impacts on the Yellow River Basin". en. In: *Nature Reviews Earth & Environment*, pp. 1–16. DOI: 10.1038/s43017-025-00718-2.

[5] Wu, X., Yan, Z., Yang, H., Wang, S., Zhang, H., Shen, Y., **Song, S.**, Liu, Y., Guo, Y., Yang, D., and Fu, B. (2025). "Ecological restoration in the Yellow River Basin enhances hydropower potential". en. In: *Nature Communications* 16.1, p. 2566. DOI: 10.1038/s41467-025-57891-7.

2024 [6] Jiao, C., Wu, X., **Song, S.**, Wang, S., Xiang, B., and Fu, B. (2024). "River stabilization reshaped human-nature interactions in the Lower Yellow River Floodplain". en-US. In: *Journal of Environmental Management* 371, p. 122957. DOI: 10.1016/j.jenvman.2024.122957.

[7] **Song, S.**, *Wang, S., Jiao, C., and Ibarra, E. J. M. (2024). "ABSESpy: An agent-based modeling framework for social-ecological systems". en. In: *Journal of Open Source Software* 9.96, p. 6298. DOI: 10.21105/joss.06298.

[8] **Song, S.**, Wen, H., Wang, S., Wu, X., Cumming, G. S., and Fu, B. (2024). "Quantifying the effects of institutional shifts on water governance in the Yellow River Basin: A social-ecological system perspective". en-US. In: *Journal of Hydrology* 629, p. 130638. DOI: 10.1016/j.jhydrol.2024.130638.

2023 [9] Jiao, C., *Wang, S., **Song, S.**, and Fu, B. (2023). "Long-term and seasonal variation of open-surface water bodies in the Yellow River Basin during 19902020". en. In: *Hydrological Processes* 37.3, e14846. DOI: 10.1002/hyp.14846.

[10] **Song, S.**, *Wang, S., Wu, X., Wei, Y., Cumming, G. S., Qin, Y., Wu, X., and Fu, B. (2023). "Identifying Regime Transitions for Water Governance in the Yellow River Basin, China". en. In: *Water Resources Research* 59.12, e2022WR033819. DOI: 10.1029/2022WR033819.

[11] Wu, X., *Fu, B., Wang, S., **Song, S.**, Lusseau, D., Liu, Y., Xu, Z., and Liu, J. (2023). "Bleak prospects and targeted actions for achieving the Sustainable Development Goals". en-US. In: *Science Bulletin* 68.22, pp. 2838–2848. DOI: 10.1016/j.scib.2023.09.010.

2022 [12] Chen, P., *Wang, S., **Song, S.**, Wang, Y., Wang, Y., Gao, D., and Li, Z. (2022). "Ecological restoration intensifies evapotranspiration in the Kubuqi Desert". en. In: *Ecological Engineering* 175, p. 106504. DOI: 10.1016/j.ecoleng.2021.106504.

[13] **Song, S.**, *Wang, S., Wu, X., Huang, Y., and Fu, B. (2022). "Decreased virtual water outflows from the Yellow River basin are increasingly critical to China". en-US. In: *Hydrology and Earth System Sciences* 26.8, pp. 2035–2044. DOI: 10.5194/hess-26-2035-2022.

[14] Wang, Y., *Liu, Y., **Song, S.**, Yao, Y., and Fu, B. (2022). "A review of community-based social-ecological system adaptation pathways". zh-CN. In: *Progress in Geography* 41.5, pp. 935–944.

[15] Wu, X., *Fu, B., Wang, S., **Song, S.**, Li, Y., Xu, Z., Wei, Y., and Liu, J. (2022). "Decoupling of SDGs followed by re-coupling as sustainable development progresses". en. In: *Nature Sustainability*. DOI: 10.1038/s41893-022-00868-x.

2021 [16] Gao, D., *Wang, S., Li, Z., Wei, F., Chen, P., **Song, S.**, Wang, Y., Wang, L., and Fu, B. (2021). "Threshold of vapourpressure deficit constraint on light use efficiency varied with soil water content". en. In: *Ecohydrology*. DOI: 10.1002/eco.2305.

[17] Li, Z., *Wang, S., **Song, S.**, Wang, Y., and Musakwa, W. (2021). "Detecting land degradation in Southern Africa using Time Series Segment and Residual Trend (TSS-RESTREND)". en. In: *Journal of Arid Environments* 184, p. 104314. DOI: 10.1016/j.jaridenv.2020.104314.

[18] **Song, S.**, *Du, J., Wu, Q., Ni, M., Wang, Y., and Zhang, Y. (2021). "The responses of *Spinifex littoreus* to sand burial on the coastal area of Pingtan Island, Fujian Province, South China". en. In: *Écoscience*, pp. 1–10. DOI: 10.1080/11956860.2021.1888523.

[19] **Song, S.**, *Wang, S., Fu, B., Dong, Y., Liu, Y., Chen, H., and Wang, Y. (2021). "Improving representation of collective memory in socio-hydrological models and new insights into flood risk management". en. In: *Journal of Flood Risk Management* 14.1. DOI: 10.1111/jfr3.12679.

[20] Wang, S., **Song, S.**, Zhang, J., Wu, X., and *Fu, B. (2021). "Achieving a fit between social and ecological systems in drylands for sustainability". en-US. In: *Current Opinion in Environmental Sustainability* 48, pp. 53–58. DOI: 10.1016/j.cosust.2020.09.008.

[21] Wang, Y., *Liu, Y., **Song, S.**, and Fu, B. (2021). "Research progress of the water-food-energy-ecosystem nexus". zh-CN. In: *Advances in earth science* 36.07, pp. 684–693.

[22] Yao, Y., Fu, B., *Liu, Y., Wang, Y., and **Song, S.** (2021). "The contribution of ecosystem restoration to sustainable development goals in Asian drylands: A literature review". en. In: *Land Degradation & Development*, ldr.4065. DOI: 10.1002/ldr.4065.

2020 [23] **Song, S.**, *Wang, S., Fu, B., Liu, Y., Wang, K., Li, Y., and Wang, Y. (2020). "Sediment transport under increasing anthropogenic stress: Regime shifts within the Yellow River, China". en-US. In: *Ambio* 49.12, pp. 2015–2025. DOI: 10.1007/s13280-020-01350-8.

2019 [24] **Song, S.**, *Wang, S., Fu, B., Chen, H., Liu, Y., and Zhao, W. (2019). "Study on adaptive governance of social-ecological system: Progress and prospect". zh-CN. In: *Acta Geographica Sinica* 74.11, pp. 2401–2410.

[25] Zhang, M., Wang, S., *Fu, B., Wei, X., Wang, C., **Song, S.**, and Wei, F. (2019). "Structure Disentanglement and Effect Analysis of the Arid Riverscape Social-Ecological System Using a Network Approach". en. In: *Sustainability* 11.19, p. 5159. DOI: 10.3390/su11195159.

2017 [26] Yang, X., *Du, J., Qin, J., Chen, Z., Yang, L., and **Song, S.** (2017). "Diurnal variation characteristics of leaf water potential of Spinifex littoreus on the nebkhas in different succession periods on the coast of Pingtan Island, Fujian Province, China". zh-CN. In: *Chinese Journal of Applied Ecology* 28.10, pp. 3260–3266.

B) Publications without peer review process

2024 [1] **Song, S.**, Wang, S., Jiao, C., and Mantilla, E. J. (2024). "Empowering Human-Water System Analysis through ABSESpy: An Agent-Based Modeling Framework of SES". en. In: EGU24. Copernicus Meetings. DOI: 10.5194/egusphere-egu24-5635.

2023 [2] **Song, S.**, Wang, S., and Fu, B. (2023). "Institutional impacts on the evolution of the Yellow River, China: a perspective from socio-hydrological modelling". en. In: EGU2023. Vienna, Austria: Copernicus Meetings. DOI: 10.5194/egusphere-egu23-4221.

2019 [3] **Song, S.**, Wang, S., Fu, B., Yanxu, L., Kevin, W., Yikai, L., and Yaping, W. (2019). "Sediment Transport under Increasing Anthropogenic Stress: Regime Shifts Within the Yellow River, China". en. In: AGU Fall Meeting 2019. San Francisco, USA: AGU.

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The following above-mentioned publications have evolved from my doctoral dissertation:

- "Institutional impacts on the evolution of the Yellow River, China" (2023)
- "Identifying Regime Transitions for Water Governance in the Yellow River Basin, China" (2023)
- "Study on adaptive governance of social-ecological system: Progress and prospect" (2019)