

姜瑶

讲师，硕士生导师。主要从事灌区水文过程及模拟、水资源系统分析与规划决策、流域水循环演变机理等方向的教学与研究工作。近年来主持国家自然科学基金项目 2 项、江西省自然科学基金项目 1 项，在国内外本领域国内外顶级或重要科技期刊上发表学术论文 10 余篇。

电子邮箱: jiangyao313@ncu.edu.cn



教育经历

- (1) 2013.09-2017.06, 中国农业大学, 水利工程, 博士
- (2) 2011.09-2013.06, 中国农业大学, 水文学及水资源, 硕士
- (3) 2007.09-2011.06, 中国农业大学, 农业水利工程, 学士

工作经历

- (1) 2021.07 至今, 南昌大学, 工程建设学院, 讲师
- (2) 2018.10-2020.12, 北京师范大学, 水科学研究院, 博士后
- (3) 2017.08-2018.09, 长江水利委员会长江科学院, 工程师

代表性科研项目 (限 5 项):

- (1) 国家自然科学基金地区基金项目, 52269012, 不确定性条件下基于过程的农业水资源多维调控, 2023.01-2026.12, 主持
- (2) 江西省自然科学基金青年基金项目, 20232BAB214084, 气候变化下基于过程响应的赣抚平原灌区水资源空间配置优化, 2023.07-2026.06, 主持
- (3) 国家自然科学基金青年基金项目, 51909003, 基于过程模拟与优化配置耦合的灌区高效用水调控研究, 2020.01-2022.12, 主持
- (4) 国家自然科学基金重大研究计划重点项目, 91647202, 变化环境下的雅鲁藏布江流域径流响应与水文过程演变机理研究, 2017.01-2020.12, 参与
- (5) 国家重点研发计划子课题项目, 2016YFC0400206-04, 扬水灌区输蓄水工程水量优化调配技术研究, 2016.07-2020.08, 参与

代表性科研成果 (限 10 项):

- (1) Xiong Lvyang, **Jiang Yao**, Li Xinyi, Ren Dongyang, Huang Guanhua*. Long-term regional groundwater responses and their ecological impacts under agricultural water saving in an arid irrigation district, upper Yellow River basin. *Agricultural Water Management*, 2023, 288: 108493.
- (2) **Jiang Yao**, Xu Zongxue*, Xiong Lvyang. Runoff variation and response to precipitation on multi-spatial and temporal scales in the southern Tibetan Plateau. *Journal of Hydrology: Regional Studies*, 2022, 42: 101157.
- (3) **Jiang Yao**, Xiong Lvyang, Xu Zongxue*, Huang Guanhua. A simulation-based optimization model for watershed multi-scale irrigation water use with considering impacts of climate

changes. *Journal of Hydrology*, 2021: 126395.

- (4) **Jiang Yao**, Xiong Lvyang, Yao F, Xu Zongxue*. Optimizing regional irrigation water allocation for multi-stage pumping-water irrigation system based on multi-level optimization-coordination model. *Journal of Hydrology X*, 2019, 4: 100038.
- (5) Xu Xu, **Jiang Yao**, Liu Minghuan, Huang Quanzhong, Huang Guanhua*. Modeling and assessing agro-hydrological processes and irrigation water saving in the middle Heihe River basin. *Agricultural Water Management*, 2019, 211: 152-164.
- (6) Liu Minghuan, **Jiang Yao**, Xu Xu, Huang Quanzhong, Huo Zailin, Huang Guanhua. Long-term groundwater dynamics affected by intense agricultural activities in oasis areas of arid inland river basins, Northwest China. *Agricultural Water Management*, 2018, 203: 37-52.
- (7) **Jiang Yao**, Xu Xu, Huang Quanzhong, Huo Zailin, Huang Guanhua. Optimizing regional irrigation water use by integrating a two-level optimization model and an agro-hydrological model. *Agricultural Water Management*, 2016, 178: 76-88.
- (8) **Jiang Yao**, Xu Xu, Huang Quanzhong, Huo Zailin, Huang Guanhua. Assessment of irrigation performance and water productivity in irrigated areas of the middle Heihe River basin using a distributed agro-hydrological model. *Agricultural Water Management*, 2015, 147: 67-81.
- (9) 姜瑶, 颜泽文, 黎良辉, 闫峰, 熊吕阳*. 灌区用水优化模型参数全局敏感性分析与不确定性优化. *农业机械学报*, 2023, 54(07): 372-380.
- (10) 姜瑶, 熊吕阳, 姚付启*. 基于两层协调模型的多级扬水灌区供水调配优化. *农业机械学报*, 2019, 50(05): 310-319.