导师简介

<table>
<tr><td>姓名</td><td>于磊</td><td>性别</td><td>男</td><td>出生年月</td><td>1990 年 9 月</td><td rowspan="4">  </td></tr>
<tr><td>职称</td><td>副教授</td><td>民族</td><td>汉</td><td>籍　贯</td><td>山东沂水</td></tr>
<tr><td>电子邮箱</td><td colspan="3">yulei2018@zzu.edu.cn</td><td>最终学位</td><td>博士</td></tr>
<tr><td>学术头衔/兼职</td><td colspan="5">中原青年拔尖人才，兼任中国水利学会水资源专业委员会委员、中国系统工程学会水利系统工程专业委员会委员兼副秘书长、中国自然资源学会水资源专业委员会委员、The Innovation、Crop Health、中国环境科学 等期刊青年编委</td></tr>
<tr><td>研究方向</td><td colspan="6">水资源配置-调度、水-能源-粮食纽带、减污降碳、国家水网、能源环境系统分析</td></tr>
<tr><td>主要学习、科研和工作经历</td><td colspan="6">2018.9 --至今，郑州大学，水利与交通学院，讲师、副教授、直聘教授
2018.9-2024.3，郑州大学水利工程博士后科研流动站，博士后
2016.9-2017.8，加拿大里贾纳大学，环境工程，联合培养
2013.9-2018.6，华北电力大学，能源环境工程，工学博士</td></tr>
<tr><td>代表性科研成果</td><td colspan="6">近年来，主持国家级项目 4 项、省部级及横向项目多项，荣获三育人、优秀共产党员、优秀班主任、优秀毕业论文指导教师称号，指导研究生获国家奖学金、国家级竞赛奖励。
科研项目：
1. 国家重点研发计划子课题，基于多层多目标的水系统低碳调配技术研发，2025-2027，主持；
2. 国家重点研发计划子课题，区域尺度的气候变化-水-能-粮系统间的碳效应纽带关系识别，2025-2027，主持；
3. 国家重点研发计划子课题，面向节水减污、优能降碳、宜境扩绿、高质量增长等多目标统筹的绿色流域构建路径优化研究，2023-2027，主持；
4. 国家自然科学基金青年项目，基于互馈联合风险的城市水-能源耦合系统解析及优化配置方法研究，2020.1-2022.12，主持；
5. 中原青年博士后创新人才支持计划项目，多层多重不确定下区域“水-能-粮”互馈解析及协同优化配置方法研究，2019.9-2021.12，主持；
6. 水资源工程与调度全国重点实验室开放研究基金，双碳目标下黄河流域水-能源-粮食关联分析及协同优化研究，2024-2025，主持；
7. 农业水资源高效利用全国重点实验室开放基金，灌区多水源系统水资源多目标优化及可视化方法研究，2024-2025，主持。</td></tr>
</table>

代表性论文：

1. Qiting Zuo; Qianwen Li; Lan Yang; Rui Jing; Junxia Ma; **Lei Yu(*)**, Incorporating carbon sequestration towards a water-energy-food-carbon planning with uncertainties, iScience, 2023. 9, 26(9), 107669.（SCI, Cell 子刊）
2. Shanshan Huang; Cai Suo; Junhong Guo; Jing Lv; Rui Jing; **Lei Yu (*);** Yurui Fan; Yanming Ding(*), Balancing the water-energy dilemma in nexus system planning with bi-level and multi-uncertainty, Energy, 2023. 9, 278, 127720.（SCI，中科院一区）
3. Donglin Gu[1]; Jiahang Guo[1]; Yurui Fan(*); Qiting Zuo; **Lei Yu(*)**, Evaluating water-energy-food system of Yellow River basin based on type-2 fuzzy sets and Pressure-State-Response model, Agricultural Water Management, 2022. 6, 267, 107607. （SCI，中科院一区）
4. Yurui Fan(*); Xiaogang Shi; Qingyun Duan; **Lei Yu(*)**, Towards reliable uncertainty quantification for hydrologic predictions, Part I: Development of a particle copula Metropolis Hastings method, Journal of Hydrology, 2022. 9, 612, 128163. （SCI，中科院一区）
5. Yurui Fan(*); Xiaogang Shi; Qingyun Duan; **Lei Yu(*)**, Towards reliable uncertainty quantification for hydrologic predictions, part II: Characterizing impacts of uncertain factors through an iterative factorial data assimilation framework, Journal of Hydrology, 2022. 612, 128136. （SCI，中科院一区）
6. Qiting Zuo; Qingsong Wu; **Lei Yu (*)**; Yongping Li; Yurui Fan, Optimization of agricultural management considering the framework of water, energy and food, Agricultural Water Management, 2021. 7, 253, 106907. (SCI，中科院一区)
7. Xixia Ma; Huili Wang; **Lei Yu (*)**; Yongping Li; Yurui Fan; Jinping Zhang; Junlong Zhang, Multi-preference based interval fuzzy-credibility optimization for planning the management of multiple water resources with multiple water-receiving cities under uncertainty, Journal of Hydrology, 2020. 12, 591,125259. (SCI，中科院一区)
8. **Lei Yu (*)**; Yao Xiao; Xueting Zeng; Yongping Li; Yurui Fan, Planning water-energy-food nexus system management under multi-level and uncertainty, Journal of Cleaner Production, 2020. 4, 251,119658. (SCI，中科院一区)
9. **Lei Yu (*)**; Yao Xiao; Shan Jiang (*), Yongping Li; Yurui Fan; Guohe Huang; Jing Lv; Qiting Zuo; Fuqiang Wang, A copula-based fuzzy interval-random programming approach for planning water-energy nexus system under uncertainty, Energy, 2020. 1, 196,117063. (SCI，中科院一区)
10. Xixia Ma; Jingwen Zhang; **Lei Yu (*)**; Yurui Fan; Jinping Zhang, An interval joint-probabilistic stochastic flexible programming method for planning municipal-scale energy-water nexus system under uncertainty, Energy Conversion and Management, 2020. 3, 208,112576. (SCI，中科院一区)
11. **Lei Yu (*)**; Qianwen Li; Shuwei Jin (*); Cong Chen; Yongping Li; Yurui Fan; Qiting Zuo, Coupling the two-level programming and copula for optimizing energy-water nexus system management - A case study of Henan Province, Journal of Hydrology, 2020. 7, 586,124832. (SCI，中科院一区)
12. Shuwei Jin (*); Yongping Li; **Lei Yu (*)**; Cai Suo; Kai Zhang, Multidivisional planning model for energy, water and environment considering synergies, trade-offs and uncertainty, Journal of Cleaner Production, 2020. 6, 259,121070. (SCI，中科院一区)

13. **Lei Yu**; Yongping Li (*); Guohe Huang, Planning municipal-scale mixed energy system for stimulating renewable energy under multiple uncertainties - The City of Qingdao in Shandong Province, China, Energy, 2019. 1, 166:1120-1133. (SCI, 中科院一区)
14. **Lei Yu**; Yongping Li (*), A flexible-possibilistic stochastic programming method for planning municipal-scale energy system through introducing renewable energies and electric vehicles, Journal of Cleaner Production, 2019. 1, 207: 772-787. (SCI, 中科院一区)
15. Yanming Ding (*); Wenlong Zhang; **Lei Yu (*)**; Kaihua Yu, The accuracy and efficiency of GA and PSO optimization schemes on estimating reaction kinetic parameters of biomass pyrolysis, Energy, 2019. 6, 176:582-588. (SCI, 中科院一区)
16. **Lei Yu**; Yongping Li (*); Guohe Huang; Yurui Fan, Shuo Yin, Planning regional-scale electric power systems under uncertainty: A case study of Jing-Jin-Ji region, China, Applied Energy, 2018. 2, 212: 834-849. (SCI, 中科院一区)
17. **Lei Yu**; Yongping Li (*); Guohe Huang; Yurui Fan, Shuang Nie, A copula-based flexible-stochastic programming method for planning regional energy system under multiple uncertainties: A case study of the urban agglomeration of Beijing and Tianjin, Applied Energy, 2018. 1, 210: 60-74. (SCI, 中科院一区)
18. **Lei Yu**; Yongping Li (*); Baoguo Shan; Guohe Huang; Liping Xu, A scenario-based interval-stochastic basic-possibilistic programming method for planning sustainable energy system under uncertainty: A case study of Beijing, China, Journal of Cleaner Production, 2018. 10, 197: 1454-1471. (SCI, 中科院一区)
19. **Lei Yu**; Yongping Li (*); Guohe Huang; Chunjiang An, A robust flexible-probabilistic programming method for planning municipal energy system with considering peak-electricity price and electric vehicle, Energy Conversion and Management, 2017. 4, 137: 97-112. (SCI, 中科院一区)
20. **Lei Yu**; Yongping Li (*); Guohe Huang, A fuzzy-stochastic simulation-optimization model for planning electric power systems with considering peak-electricity demand: A case study of Qingdao, China, Energy, 2016. 3, 98, 190-203. （SCI, 中科院一区）

科技奖励、荣誉称号：

1. 2024 年，中国科协财政项目评审专家
2. 2021 年，郑州大学优秀青年人才创新团队
3. 2021 年，河南省高等院校省级高层次人才
4. 2020 年，郑州大学青年拔尖人才
5. 2019 年，中原青年拔尖人才

课题组科研氛围浓厚，与国内外顶尖高校长期保持密切合作，欢迎报考！