

导师简介

姓名	孙斌	性别	男	出生年月	1984.10	
职称	教授	民族	汉	籍贯	河南 新乡	
电子邮箱	sunbin@zzu.edu.cn			最终学位	工学博士	
学术头衔/ 兼职	博士生导师、兼任河南省水力发电学会泥沙专业委员会副秘书长、河南省水利学会泥沙和水动力学分会副秘书长					
研究方向	明渠非恒定流水力特性、市政管网过流淤积与冲蚀机理、近海消波与防浪减灾机理					
主要学习、 科研和工 作经历	2003.09-2007.06 西北农林科技大学 水利与建筑工程学院 水利水电工程 工学学士 2007.09-2010.06 西北农林科技大学 水利与建筑工程学院 农业水土工程 工学硕士 2010.09-2013.12 西北农林科技大学 水利与建筑工程学院 水利水电工程 工学博士 2013.12- 今 郑州大学 水利与交通学院(原水利与环境学院)历任教学秘书、实验中心主任等职					
代表性 教学成果 与荣誉	<p>先后多次被评为郑州大学优秀共产党员、“三育人”先进个人、平安校园建设工作先进个人、大学生社会实践活动先进工作者等称号，指导本科生和研究生获得多项省级及以上创新奖励成果。</p> <p>2019.07 指导学生获得第六届全国大学生水利创新设计大赛特等奖</p> <p>2021.07 指导学生获第七届全国大学生水利创新设计大赛特等奖</p> <p>2022.08 指导学生获 2022 年河南省“互联网+”大学生创新创业大赛暨第八届中国国际“互联网+”大学生创新创业大赛河南赛区选拔赛一等奖</p> <p>2022.09 指导学生获 2022 年“挑战杯”河南省大学生创业计划特等奖</p> <p>2023.08 指导学生获 2023 年河南省“互联网+”大学生创新创业大赛暨第九届中国国际“互联网+”大学生创新创业大赛河南赛区选拔赛一等奖</p> <p>2023.08 指导学生获 2023 年“挑战杯”河南省大学生创业计划竞赛活动一等奖</p> <p>2023.11 指导学生获第十八届“挑战杯”全国大学生课外学术科技作品竞赛特等奖</p>					

<p>代表性 科研成果</p>	<p>一、近 5 年部分科研项目</p> <p>[1]国家自然科学基金面上项目，基于组策略的多沙灌区翼型量水设施测控机理与协同布局模式研究，主持</p> <p>[2] 国家重点研发计划子课题，科技部，非满水状态下城市排水管道全工况无损检测装备，主持</p> <p>[3] 河南省自然科学基金面上项目，河南省科技厅，灌区挟沙明渠翼型堰槽式测控一体闸量控机理与水力优化研究，主持</p> <p>[4]河南省高等学校重点科研项目,河南省教育厅，基于MIGA的引黄灌区翼型量水设施水力优化与应用研究，主持</p> <p>[5] 农业农村部节水灌溉工程重点实验室开放项目，现代节水型灌区新型量水设施测流特性与水力优化研究，主持</p> <p>二、近 5 年部分论文论著</p>
	<p>[1] B. Sun, T. Ren, J. Huang, F. Wang, G. Zhang, Z. Li. Experimental study of a leakage location method based on plug flow mass transfer characteristics. <i>Process Safety and Environmental Protection</i>, 189 (2024) 950-959.</p> <p>[2] Z. Li, B. Wang, F. Wang, B. Sun*, L. Li. Flow dynamics and turbulent coherent structures around sediment reduction plates of a sewer system. <i>Journal of Environmental Management</i>, 366 (2024) 121594.</p> <p>[3] H. Li, B. Sun, Z. Li, D. Li, Y. Yang, F. Wang*. Stage-discharge prediction in the multi-stage ice-covered compound channel. <i>Physics of Fluids</i>, 36 (6) (2024) 066607.</p> <p>[4] T. Ren, W. Ma, J. Huang, Z. Li*, B. Sun. Leakage characteristics of plug flow in the case of pipe leakage. <i>Canadian Journal of Chemical Engineering</i>, 102(11) (2024) 4055-4068.</p> <p>[5] Z. Li, X. Wang, J. Xiong, S. Zhao, F. Wang*, B. Sun. Flow structure, bed morphology and contaminated sediment transport at the confluences of pipe and channel. <i>Environmental Fluid Mechanics</i>,24(3) (2024) 367-385.</p> <p>[6] Z. Xu, Z. Li*, B. Sun, L. Li. Experimental investigation on attenuating wave run-up by emergent length and submerged length of rigid vegetation on a composite breakwater. <i>Ocean Engineering</i>, 309 (2024) 118543.</p> <p>[7] H. Fang, Z. Zhang, D. Di, J. Zhang, B. Sun, N. Wang, B. Li. Integrating fluid-solid coupling domain knowledge with deep learning models: An automatic and interpretable diagnostic system for the silting disease of drainage pipelines. <i>Tunnelling and Underground Space Technology</i>,142 (2023) 105386.</p> <p>[8] Z. Li, X. Wang, F. Wang, B. Sun, S. Chen. Flow structure of the confluence between an open</p>

channel and a pipe. *Water Science and Technology*, 88(10) (2023) 2646–2660

- [9] **B. Sun**, L. Feng, Z. Li, Z. Song, C. Li. 3D numerical simulation of the separation zone at the channel–pipe junction. *Water Science and Technology*, 88 (6) (2023) 1358-1373.
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- [11] Z. Song, L. Yang, Z. Li, **B. Sun**. Hydraulic characteristics optimization of an airfoil pillar-shaped flume based on the Hicks–Henne function and NSGA-II algorithm. *Journal of Hydroinformatics*, 25(3) (2023), 867-880.
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- [14] **B. Sun**, Z. Song, L. Yang, C. Li, Z. Li. Experimental study and numerical simulation of flow over the inclined airfoil-shaped weir in rectangular channel, *Flow Measurement and Instrumentation*, 88 (2022) 102256.
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三、近 5 年部分代表性知识产权成果

[1]孙斌,李成,张海嘉,宋占琪,仝安,方宏远,杨绍林. 一种适用于制造高阶非线性波的楔体柱塞造波装置[P]. 河南省: CN114235331B,2023-06-23. (状态: 授权)

[2]孙斌,张广毅,方宏远等. 一种基于高速稳定水流发生器的水力空化设备[P]. 河南省: CN113175464B,2022-11-11. (状态: 授权)

[3]孙斌,杨昊宇,郑薇,苏朋. 一种排水管内淤泥检测装置[P]. 河南省: CN220354826U,2024-01-16. (状态: 授权)

[4]孙斌,郑薇,仝安,阳润芝,麻文军. 一种用于排水管道淤积污泥收集装置[P]. 河南省: CN218176105U,2022-12-30. (状态: 授权)

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[6]孙斌,宋占琪,杨磊,李志刚,李成,仝安. 一种用于渠道水量监测的机翼堰槽式测控一体闸[P]. 河南省: CN217157159U, 2022-08-09. (状态: 授权)

[7]董俊,周慧明,勇鹏飞,方宏远,孙斌,王念念,秦晓林,孙妍. 一种射流推进器[P]. 河南省: CN216994813U, 2022-07-19. (状态: 授权)

[8]孙斌,仝安,阳润芝. 排水管道中的泥沙输送装置[P]. 河南省: CN216689656U, 2022-06-07. (状态: 授权)

[9]孙斌,陈仕哲,阳润芝,仝安,方宏远,张超,李志伟. 一种给排水管道综合试验平台[P]. 河南省: CN216012700U, 2022-03-11. (状态: 授权)

四、近 5 年部分科技与教学获奖

[1]河南省教育厅, 河南省高等教育教学成果特等奖, 基于“实践育人共享平台”大土木人才培养模式探索与实践, 2022.04, 豫教[2022]14842

[2]河南省教育厅, 河南省教育信息化优秀成果一等奖, 湖泊富营养化与水华防控虚拟仿真实验建设与实践, 2022.07, 豫教[2022]24094