

## 李斌简介

姓名	李斌	性别	男	出生年月	1993.11	
职称	讲师	民族	汉	籍贯	甘肃省白银市	
电子邮箱	13523519067@163.com		最终学位	博士		
学术头衔	无					
研究方向	地下管道安全运维					
主要学习、科研和工作经历	2022.05-至今 郑州大学 黄河实验室 专职科研岗 2017.09-2021.12 郑州大学 博士 2015.09-2017.06 郑州大学 硕士 2011.09-2015.06 郑州大学 学士					
代表性教学成果与教学荣誉	无。					
代表性科研成果与科研奖励	<b>1、在研科研项目</b> [1] 国家重点研发计划子课题（2022YFC381000） [2] 国家自然科学基金青年项目（52208375） [3] 中国博士后科学基金特别资助（站前）（2022TQ0305） [4] 中国博士后科学基金第 72 批面上二等资助（2022M722884） [5] 河南省重点研发与推广专项项目（科技攻关）（232102321073） [6] 河南省青年人才托举工程项目（2023HYTP016） <b>2、代表性论文、论著、专利</b> <b>2.1 代表性论文</b> [1] <b>Bin Li</b> , Hongyuan Fang*, Kejie Zhai, Kangjian Yang, Xijun Zhang, Yuke Wang. Mechanical behavior of concrete pipes with erosion voids and the effectiveness evaluation of the polyurethane grouting. Tunnelling and Underground Space Technology, 2022.8, 129: 104672. [2] <b>Bin Li</b> , Hongyuan Fang*, Kangjian Yang, Xijun Zhang, Xueming Du, Niannian					

Wang, Xiaoxiang Guo<sup>3\*</sup>. Impact of erosion voids and internal corrosion on concrete pipes under traffic loads. *Tunnelling and Underground Space Technology*. (online)

- [3] **Bin Li**, Fuming Wang, Hongyuan Fang, Kangjian Yang, Xijun Zhang, Yanting Ji. Experimental and Numerical Study on Polymer Grouting Pretreatment Technology in Void and Corroded Concrete Pipes[J]. *Tunnelling and Underground Space Technology*, 2021.7, 113: 103842.
- [4] **Bin Li**, Wei Yu, Yongen Xie, Hongyuan Fang\*, Xueming Du, Niannian Wang, Kejie Zhai, Dianchang Wang, Xianming Chen, Mingrui Du, Mingming Sun, Xiaohua Zhao. Trenchless rehabilitation of sewage pipelines from the perspective of the whole technology chain: A state-of-the-art review. *Tunnelling and Underground Space Technology*, 2023, 134: 105022.
- [5] **Bin Li**, Xiaoxiang Guo, Hongyuan Fang, Jingli Ren, Kangjian Yang, Fu Wang, Peiling Tan. Prediction equation for maximum stress of concrete drainage pipelines subjected to various damages and complex service conditions[J]. *Construction and Building Materials*, 2020.12, 264: 120238.
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Pang, Kejie Zhai. Prediction model for maximum shear displacement of pipe joints with preexisting defects based on finite element–multiple nonlinear regression method. *Structural Concrete*, 2021.10, 22 (6) : 3727-3745.

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[11] Hongyuan Fang, **Bin Li**, Fuming Wang, Yuke Wang, Can Cui. The mechanical behaviour of drainage pipeline under traffic load before and after polymer grouting trenchless repairing[J]. *Tunnelling and Underground Space Technology*, 2018.4, 74: 185-194.

[12] Yuke Wang, Musen Han, **Bin Li\***, Yukuai Wan. Stability evaluation of earth-rock dam reinforcement with new permeable polymer based on reliability method. *Construction and Building Materials*, 320, 2022.1.22: 126294.

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[15] **李斌**, 方宏远\*, 杜雪明, 孙明明, 薛冰寒. 脱空混凝土管道纵向力学行为及自膨胀高聚物注浆修复性能提升. *工程力学*. (网络首发)

[16] 王复明, 方宏远\*, **李斌**, 陈灿. 交通荷载作用下埋地承插口排水管道动力响应分析[J]. *岩土工程学报*, 2018, 40(12): 2274-2280.

## 2.2 授权发明专利

[1] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. Trenchless rehabilitation system for deformation of large diameter HDPE pipelines and method thereof. 专利号: US 11,002,398 B2, 授权日: 2021-05-11. (美国发明专利)

[2] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. In-service and trenchless repair method for disconnection of drainage pipeline. 专利号: US 10,907,761 B2, 授

权日：2021-02-02。（美国发明专利）

[3] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. Trenchless rehabilitation device for disconnects on large-diameter concrete drainage pipe and method thereof. 专利号: US 11,079,057 B2, 授权日: 2021-08-03. (美国发明专利)

[4] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. Detecting and repairing method for external diseases of buried drainage pipeline. 专利号: US 11,231,139 B2, 授权日: 2022-01-25. (美国发明专利)

[5] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. Support tool and back-pressure grouting device for leakage repair of inspection well and repair method thereof. 专利号: US 11,346,487 B2, 授权日: 2022-05-31. (美国发明专利)

[6] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. A trenchless integrative repair method for concrete drainage pipeline with cracking, corrosion and subsidence. 申请号: 16/858,73, 申请日: 2020-04-27. (已获授权通知) (美国发明专利)

[7] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. 用于大管径 HDPE 管道压扁变形的非开挖修复装置及方法. 专利号: ZL 201910911307.X, 授权日: 2021-04-16. (发明专利)

[8] 王复明, 方宏远, 赵鹏, 潘艳辉, **李斌**, 何航. 一种内套管弧形成孔及管道沉陷复位抬升方法. 专利号: ZL 201910911280.4, 授权日: 2021-02-26. (发明专利)

[9] 方宏远, **李斌**, 于威, 孙明明, 谢永恩, 王印. 一种基于高聚物与地下管道接触面的膨胀力测试装置. 专利号: ZL 202220548573.8, 授权日: 2022-08-23. (实用新型)

[10] 方宏远, 赵鹏, **李斌**, 雷建伟, 郭成超, 潘艳辉, 李海军, 吴伟, 卢宗胜. 一种管道雷达检测机器人. 专利号: ZL 202020204771.3, 授权日: 2020-12-01. (实用新型)

### 3、科研奖励

[1] 2021 年河南省教育厅优秀科技论文一等奖

[2] 2022 年河南省教育厅优秀科技论文一等奖

[3] 河南省第五届自然科学学术一等奖 (学术论文类)

[4] 广东省科技进步二等奖

[5] 第一届河南省博士后创新创业大赛银奖

**[6]** 第一届河南省博士后创新创业优秀博士后