

## 导师简介

姓名	王日冉	性别	女	出生年月	1990.02	
职称	直聘副研究员	民族	汉	籍贯	河南潢川	
电子邮箱	wangrr@zzu.edu.cn		最终学位	博士		
学术头衔/兼职	无					
研究方向	道路工程材料					
主要学习 科研和工 作经历	2022.10-至今	郑州大学	黄河实验室   直聘副研究员			
	2020.07-2022.09	郑州大学	力学博士后流动站   博士后			
	2016.09-2020.07	郑州大学	水工结构工程   博士			
	2014.09-2016.07	郑州大学	道路与铁道工程   硕士			
	2010.09-2014.07	华北水利水电大学	水利水电工程   本科			
代表性 科研成果 及奖励	<p><b>一、科研项目</b></p> <p>(1) 中国博士后面上项目：《非线性粘弹效应作用下聚合物改性沥青疲劳损伤演化规律研究》 (主持, No.2021M692918 )</p> <p>(2) 河南省自然科学基金青年项目：《非线性粘弹效应作用下碳纳米材料改性沥青疲劳特性研究》(主持, No.222300420308 )</p> <p><b>二、论文论著</b></p> <p>(1) <b>Wang Riran</b>, Yue Mingjing, Xiong Yuchao, Yue Jinchao*, Experimental study on mechanism, aging, rheology and fatigue performance of carbon nanomaterial/SBS-modified asphalt binders[J]. <i>Construction and Building Materials</i>, 2021, 268: 121189.</p> <p>(2) <b>Wang Riran</b>, Qi Zemin, Li Ruixia, Yue Jinchao*, Investigation of the effect of aging on the thermodynamic parameters and the intrinsic healing capability of graphene oxide modified asphalt binders[J]. <i>Construction and Building Materials</i>, 2020, 230: 116984.</p> <p>(3) <b>Wang Riran</b>, Xiong Yuchao, Yue Mingjing, Hao Meimei, Yue Jinchao*, Investigating the effectiveness of carbon nanomaterials on asphalt binders from hot storage stability, thermodynamics, and mechanism perspectives[J]. <i>Journal of Cleaner Production</i>, 2020, 276: 124180.</p> <p>(4) <b>Wang Riran</b>, Yue Jinchao*, Li Ruixia, Sun Yang, Evaluation of aging resistance of asphalt binder modified with graphene oxide and carbon nanotubes[J]. <i>Journal of Materials in Civil Engineering</i>, 2019, 31(11): 04019274.</p> <p>(5) <b>Wang Riran</b>, Xiong Yuchao, Ma Xiaopeng, Guo Yajun, Yue Mingjing, Yue Jinchao*,</p>					

Investigating the differences between steel slag and natural limestone in asphalt mixes in terms of microscopic mechanism, fatigue behavior and microwave-induced healing performance[J]. *Construction and Building Materials*, 2022, 328: 127107.

- (6) Yue Mingjing, Yue Jinchao, **Wang Riran\***, Xiong Yuchao, Evaluating the fatigue characteristics and healing potential of asphalt binder modified with Sasobit® and polymers using linear amplitude sweep test[J]. *Construction and Building Materials*, 2021, 289: 123054. (申请人为唯一通讯作者)
- (7) Yue Mingjing, Yue Jinchao, **Wang Riran\***, Guo Yajun, Ma Xiaopeng. A comprehensive analysis of fatigue-fracture and healing capacity of Sasobit®/polymer-modified asphalt from two perspectives: binder and fine aggregate matrix[J]. *Journal of Materials in Civil Engineering*, 2022. Forthcoming, DOI: 10.1061/(ASCE)MT.1943-5533.0004655. (申请人为唯一通讯作者)
- (8) Zhai Ming, Li Jinlong, **Wang Riran\***, Yue Jinchao, Wang Xiaofeng, Revealing mechanisms of aging and moisture on thermodynamic properties and failure patterns of asphalt-aggregate interface from the molecular scale[J]. *Journal of Materials in Civil Engineering*, 2022. Forthcoming, DOI: 10.1061/(ASCE)MT.1943-5533.0004656. (申请人为唯一通讯作者)
- (9) Wang De Cai, Sun Yang, **Wang Riran**, Li Ruixia, Zhang Qunlei, Yue Jinchao\*, *Journal of Materials in Civil Engineering*, 2022. (Accepted)
- (10) Sun Yang, Yue Jinchao, **Wang Riran**, Li Ruixia, Wang Decai\*, Investigation of the effects of evaporation methods on the high-temperature rheological and fatigue performances of emulsified asphalt residues[J]. *Advances in Materials Science and Engineering*, 2020, 2020: 4672413.

### 三、授权专利

- (1) 发明专利:《一种动水压力下沥青路面渗水性能试验方法》(专利号 202111434635.9, 公开阶段, 排名第一)
- (2) 发明专利:《一种有对照组的沥青紫外老化试验方法》(专利号 202111434654.1, 公开阶段, 排名第二)
- (3) 实用新型专利:《一种动水压力下沥青路面渗水性能试验装置》(专利号 202122952974.8, 已授权, 排名第二)

### 四、科研奖励

获得 2022 年度河南省教育厅科技成果奖优秀科技论文壹等奖。