

导师简介

姓名	赵小华	性别	男	出生年月	1991.10	
职称	副教授	民族	汉	籍贯	河南周口	
电子邮箱	zhaoxh2014@126.com		最终学位	博士		
研究方向	混凝土坝安全防护、水下爆炸、高聚物材料动力响应					
主要学习 科研和工 作经历	<p>2019.07 至今 郑州大学 水利与交通学院 副教授/研究生秘书</p> <p>2018.03-2019.03 University of Waterloo 联合培养博 加拿大</p> <p>2014.09-2019.10 武汉大学 水工结构工程 博士</p> <p>2010.09-2014.06 西北农林科技大学 农业水利工程 学士</p>					
代表性 科研成果	<p>一、代表性奖励</p> <p>[1] 中国爆破行业协会科学技术奖, 特等奖, 混凝土重力坝爆炸毁伤机理与试验技术, 2023.11。</p> <p>[2] 中华人民共和国教育部, 国家级一流本科课程, 结构力学, 2023.05。</p> <p>[3] 河南省高等教育教学成果奖, 二等奖, “双一流”建设背景下水利水电工程专业卓越工程师人才培养改革研究与实践, 2022.04。</p> <p>[4] 郑州大学, 郑州大学 2022-2023 学年“三育人”先进个人, 2023.08。</p> <p>二、代表性科研项目</p> <p>[1] 国家自然科学基金青年基金项目“高拱坝空中爆炸毁伤机制及其整体稳定性能评估”, 2021.01-2023.12。主持</p> <p>[2] 河南省自然科学基金面上项目“基于高聚物复合结构的水下爆炸防护机理研究”, 2024.01-2026.12。主持</p> <p>[3] 河南省高等学校重点科研项目“空中接触爆炸下高拱坝冲击毁伤机制及其效应评估方法”, 2021.01-2022.12。主持</p> <p>[4] 河南省博士后面上项目“水下爆炸下高拱坝冲击毁伤机制及其效应评估方法”, 2021.8-2022.8。主持</p> <p>三、代表性英文论文</p> <p>[1] Zhao Xiaohua, Wang Gaohui, Lu Wenbo, et al. Damage features of RC slabs subjected to air and underwater contact explosions. Ocean Engineering. 2018, 147: 531-45. (一区 Top)</p> <p>[2] Zhao Haonan, Fang Hongyuan, Zhao Xiaohua*. Experimental and numerical investigation on dynamic behaviors of glass fiber reinforced polymer plates under explosion loadings[J]. International Journal of Impact Engineering, 2023, 171. (一区 Top)</p> <p>[3] Haonan Zhao, Xiaohua Zhao*, Hongyuan Fang, et al. Experimental investigation of steel fiber reinforced concrete slabs subjected to underwater contact explosions[J]. Ocean Engineering, 2023, 281:114664. (一区 Top)</p> <p>[4] Liu Shucan, Zhao Xiaohua*, Fang Hongyuan, et al. Study on the protective performance of polymer layer to RC slabs under underwater explosions[J]. Ocean Engineering. 2023, 282:114997. (一区 Top)</p>					

- [5] Liu Zhidong, **Zhao Xiaohua***, Fang Hongyuan, et al. Investigation on the damage features and dynamic response of reinforced concrete slabs with polyurethane sacrificial cladding under close-range explosions[J]. Construction and Building Materials. 2023, 395:132149. (一区 Top)
- [6] Zhao Haonan, Fang Hongyuan, **Zhao Xiaohua***. The dynamic response and damage models of rebar reinforced polymer slabs subjected to contact and near-field explosions[J]. Defence Technology. 2022.
- [7] Zhao Haonan, Fang Hongyuan, **Zhao Xiaohua***. Experimental investigation of polymer gravel slab under air contact and near-field explosions[J]. Structures. 2022, 45:1803-1813.
- [8] **Zhao Xiaohua**, Wang Gaohui, Lu Wenbo, et al. Effects of close proximity underwater explosion on the nonlinear dynamic response of concrete gravity dams with orifices. Engineering Failure Analysis. 2018, 92: 566-86.
- [9] **Zhao Xiaohua**, Wang Gaohui, Lu Wenbo, et al. Experimental investigation of RC slabs under air and underwater contact explosions. European Journal of Environmental and Civil Engineering. 2021, 25(1): 190-204.
- [10] Liu Zhidong, **Zhao Xiaohua***, Liu Da, et al. Comparative Study on Blast Damage Features of Reinforced Concrete Slabs with Polyurethane Sacrificial Cladding Based on Different Numerical Simulation Methods[J]. Polymers, 2022, 14(18): 3857. <https://doi.org/10.3390/polym14183857>.
- [11] Haonan Zhao, **Xiaohua Zhao***, Hongyuan Fang. Study on load distributing function of square slab surface under the action of underwater close-in blast loading. Structural Concrete. 2024.<https://doi.org/10.1002/suco.202301027>.
- [12] **Zhao Xiaohua**, Fang Hongyuan, Wang Gaohui, et al. Safety Evaluation of Arch Dam Subjected to Underwater Contact Explosion. Mathematics. 2021, 9, 2941. <https://doi.org/10.3390/math9222941>.
- [13] **Zhao Xiaohua**, Wang Gaohui, Fang Hongyuan, et al. Shock Wave Propagation Characteristics of Cylindrical Charge and Its Aspect Ratio Effects on the Damage of RC Slabs. Advances in Materials Science and Engineering. 2021, <https://doi.org/10.1155/2021/2483995>.
- [14] Liu Shucan, **Zhao Xiaohua***, Fang Hongyuan, et al. Damage Characteristics of Polymer Plates under the Impact of the Near-Field and Contact Underwater Explosion. Advances in Materials Science and Engineering. 2021, <https://doi.org/10.1155/2021/5957847>.
- [15] Liu Zhidong, **Zhao Xiaohua***, Fang Hongyuan, et al. Experimental Study on the Damage Characteristics of Polymer Slabs Subjected to Air Contact and Close-In Explosions. Advances in Materials Science and Engineering. 2021, <https://doi.org/10.1155/2021/2825062>.

四、代表性中文论文

- [1] 赵小华, 王高辉, 卢文波, 周创兵. 高拱坝坝肩接触爆炸毁伤安全评价方法. 振动与冲击, 2020, 39(11): 265-272. (EI)
- [2] 赵小华, 刘树参, 方宏远, 等. 水下接触爆炸下高聚物层对钢筋混凝土板的防护效果[J]. 爆炸与冲击, 2023, 43(12):110-124. (EI)
- [3] 赵浩楠, 方宏远, **赵小华***, 等. 接触爆炸作用下高聚物复合板毁伤特性分析[J]. 爆炸与冲击, 2023, 43(05):3-19. (EI)
- [4] 刘志东, **赵小华***, 方宏远, 等. 高聚物牺牲包层对钢筋混凝土板的爆炸毁伤缓解效应[J]. 爆炸与冲击, 2023, 43(02):89-105. (EI)

五、代表性授权专利

- | |
|--|
| [1] 赵小华, 高政, 方宏远, 等. 用于高拱坝拱端抗下游空中接触爆炸防护的装置和方法, 专利号: ZL202010858172.8. (发明授权) |
| [2] 赵小华, 位需贝, 方宏远, 等. 评估水下接触爆炸荷载冲击下高拱坝安全状态的方法, 专利号: ZL202010858424.7. (发明授权) |
| [3] 赵小华, 赵浩楠, 方宏远, 等. 用于消除近场水下爆破冲击波的高聚物碎石防护装置, 专利号: ZL202110298297.4. (发明授权) |
| [4] 赵小华, 刘树参, 方宏远, 等. 一种用于破坏块度与冲击波特性分析的水下爆炸试验装置, 专利号: 202110450279.3. (发明授权) |
| [5] 赵小华, 杨士豪, 赵浩楠, 等. 一种基于水击波信号的电子雷管水下爆炸威力测试装置, 专利号: ZL202111200100.5. (发明授权) |
| [6] 王高辉, 赵小华, 卢文波, 等. 一种用于消除水下近距离爆破冲击波的空气隔层装置, 专利号: ZL 201611243544.6. (发明授权) |
| [7] 王高辉, 赵小华, 卢文波, 等. 一种用于混凝土重力坝坝踵抗水下接触爆炸的防护装置, 专利号: ZL201611141118.1. (发明授权) |
| [8] 王高辉, 赵小华, 卢文波, 等. 水下爆破冲击波防护装置, 专利号: 201710987302.6. (发明授权) |
| [9] 王高辉, 赵小华, 卢文波, 等. 具有高抗爆性能的大坝和提高大坝抗爆性能的方法, 专利号: 201810027775.6. (发明授权) |
| [10] 赵小华, 邢英剑, 方宏远, 等. 用于临水拱型混凝土试件抗爆试验的试验装置, 专利号: ZL202221663745.2. (实用新型授权) |
| [11] 赵浩楠, 赵小华, 方宏远, 等. 用于研究拱形板在临水状态下爆炸毁伤特性的试验装置, 专利号: ZL202320452379.4. (实用新型授权) |