

各团队代表性学术成果列表

近五年来学院发表论文 786 篇，被 SCI、EI、ISTP 收录 226 篇；出版学术专著 6 部；申请专利 407 项，其中发明专利 253 项，实用新型专利 154 项，共授权 97 项。各团队代表性学术论文及获奖如下：

广西工业废渣建材资源利用工程技术研究中心团队

| 编号 | 论文题目 | 第一作者 | 发表时间 | 刊物 | 收录类别 |
|----|---|------|------------|--|------|
| 1 | A multi-phase mesoscopic simulation model for the long-term chloride ingress and electrochemical chloride extraction | 陈宣东 | 2021-02-08 | Construction and Building Materials | SCI |
| 2 | A multi-phase mesoscopic simulation model for the diffusion of chloride in concrete under freeze-thaw cycles | 陈宣东 | 2020-12-30 | Construction and Building Materials | SCI |
| 3 | Mitigation on the autogenous shrinkage of ultra-high performance concrete via using MgO expansive agent | 李顺凯 | 2021-11-01 | Construction and Building Materials | SCI |
| 4 | The long-term failure mechanisms of alkali-activated slag mortar exposed to wet-dry cycles of sodium sulphate | 李青 | 2020-09-09 | Cement and Concrete Composites | SCI |
| 5 | Microwave dielectric properties of a-CaSiO ₃ /Al ₂ O ₃ -Li ₂ CO ₃ ceramics sintered at low temperature | 刘光焰 | 2021-07-15 | Mater Electron | SCI |
| 6 | Study on the Effect and Mechanism of Alkali-Silica Reaction Expansion in Glass Concrete | 黄达 | 2021-09-24 | Sustainability | SCI |
| 7 | Functionalization of Silver/Titanium Dioxide Composites in Chitosan-based Coatings and their Egg Preservation Performances | 陈宣东 | 2021-06-01 | Jove-Journal of Visualized Experiments | SCI |
| 8 | Numerical model for local corrosion of steel reinforcement in reinforced concrete structure | 陈宣东 | 2021-04-12 | Computers and Concrete | SCI |
| 9 | Current Status and Energy Analysis of Oil Shale's Retorting Process in the World | 刘光焰 | 2021-02-19 | Petroleum Chemistry | SCI |
| 10 | A Comprehensive Review on the Utilization of Recycled Waste Fibers in Cement-Based Composites | 明阳 | 2021-06-29 | Materials | SCI |
| 11 | Portland Cement Partially Replaced by Blast Furnace Slag and Multi-Walled Carbon Nanotubes: Effect on Corrosion Resistance of Carbon Steel Reinforcement in 3% NaCl | 明阳 | 2020-09-01 | International Journal of Electrochemical Science | SCI |
| 12 | Experimental Research of Concrete with Steel Slag Powder and Zeolite Powder | 明阳 | 2020-08-01 | Journal of Renewable Materials | SCI |
| 13 | Effect of Tempering Components and Ion Doping on the Reconstructed Steel Slag. | 向瑞衡 | 2021-04-07 | Journal of Wuhan University of Technology(Materials Science Edition) | SCI |
| 14 | Effect of Tempering Components and Ion Doping on the Reconstructed Steel Slag | 向瑞衡 | 2020-12-10 | Journal of Wuhan University of Technology(Materials Science Edition) | SCI |

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|----|-------------------------------------|-----|------------|--------|----|
| 15 | 海工结构服役寿命预测细观数值模拟研究 | 陈宣东 | 2019-12-15 | 建筑材料学报 | EI |
| 16 | 干湿循环硫酸盐环境下碱矿渣水泥 C(N)-A-S-H 凝胶结构演化规律 | 朱效宏 | 2021-04-10 | 硅酸盐学报 | EI |
| 17 | 硫酸镁侵蚀后碱矿渣水泥中 C(N)-A-S-H(I)组成-结构梯度变化 | 朱效宏 | 2021-01-04 | 硅酸盐学报 | EI |
| 18 | 利用硬脂酸钙改善孔结构以降低碱矿渣水泥石吸水速率 | 李青 | 2021-02-23 | 材料导报 | EI |

国家优秀青年科学基金获得者钱凯教授团队

| 编号 | 论文题目 | 第一作者 | 发表时间 | 刊物 | 收录类别 |
|----|---|------|------------|--|------|
| 1 | Retrofitting seismically damaged steel sections encased concrete composite walls using externally bonded CFRP strips | 孙芳锦 | 2020-03-10 | Composite Structures | SCI |
| 2 | Axial compressive capacity of RC square columns strengthened by prestressed CFRP with RPC pads | 王强 | 2020-02-20 | Composite Structures | SCI |
| 3 | Effects of loading regimes on the structural behavior of RC beam-column sub-assemblages against disproportionate collapse | 钱凯 | 2021-11-11 | Engineering Structures | SCI |
| 4 | Impact of concrete strength on seismic behavior of T-shaped double-skin composite walls | 钱凯 | 2021-03-21 | Engineering Structures | SCI |
| 5 | Impact of two columns missing on dynamic response of RC flat slab structures | 钱凯 | 2018-12-15 | Engineering Structures | SCI |
| 6 | Dynamic response of RC beam-slab substructures following instantaneous removal of columns | 钱凯 | 2021-11-03 | Journal of Building Engineering | SCI |
| 7 | Punching shear strength of corroded reinforced concrete slab-column connections | 钱凯 | 2021-10-19 | Journal of Building Engineering | SCI |
| 8 | Effect of loading methods on progressive collapse behavior of RC beam-slab substructures under corner column removal scenario | 钱凯 | 2021-09-09 | Journal of Building Engineering | SCI |
| 9 | Experimental and modeling research on compression-shear behavior of carbon fiber reinforced coral concrete | 刘兵 | 2021-09-27 | Construction and Building Materials | SCI |
| 10 | Mechanical performance and failure criterion of coral concrete under combined compression-shear stresses | 刘兵 | 2021-06-21 | Construction and Building Materials | SCI |
| 11 | Strengthening and Retrofitting Precast Concrete Buildings to Mitigate Progressive Collapse Using Externally Bonded GFRP Strips | 钱凯 | 2019-06-01 | Journal of Composites for Construction | SCI |
| 12 | Effects of Steel Braces on Robustness of Steel Frames against Progressive Collapse | 钱凯 | 2021-08-28 | Journal of Structural Engineering | SCI |
| 13 | Behavior of Steel Moment Frames Using Top-and-Seat Angle Connections under Various Column-Removal Scenarios | 钱凯 | 2021-07-26 | Journal of Structural Engineering | SCI |
| 14 | Progressive Collapse Resistance of Emulative Precast Concrete Frames with Various Reinforcing Details | 钱凯 | 2021-05-17 | Journal of Structural Engineering | SCI |
| 15 | Experimental and Numerical Investigation on Progressive Collapse Resistance of Post-Tensioned Precast Concrete Beam-Column Subassemblages | 钱凯 | 2020-09-01 | Journal of Structural Engineering | SCI |
| 16 | Improving Behavior of Reinforced Concrete Frames to Resist Progressive Collapse through Steel Bracings | 钱凯 | 2018-11-30 | Journal of Structural Engineering | SCI |

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|----|---|-----|------------|--|-----|
| 17 | Shear performance of reinforced ultra-high performance concrete rectangular section beams | 王强 | 2020-07-23 | Structures | SCI |
| 18 | Effects of infill walls on load resistance of multi-story RC frames to mitigate progressive collapse | 钱凯 | 2021-06-17 | Structures | SCI |
| 19 | Experimental Study of the Relaxation Properties of Carbon Fiber Cloth | 王强 | 2020-08-14 | materials | SCI |
| 20 | Effects of Corrosion on Compressive Arch Action and Catenary Action of RC Frames to Resist Progressive Collapse Based on Numerical Analysis | 张璐 | 2021-05-19 | materials | SCI |
| 21 | Phased acoustic emission sensor array for localizing radial and axial positions of defects in hollow structures | 张璐 | 2019-11-05 | Measurement | SCI |
| 22 | Study on Form-Finding of Cable-Membrane Structures Based on Particle Swarm Optimization Algorithm | 孙芳锦 | 2020-04-30 | Mathematical Problems in Engineering | SCI |
| 23 | Evolution of the Flow Structure in the Gap and Near Wake of Two Tandem Cylinders in the AG Regime | 孙芳锦 | 2021-05-15 | Fluid Dynamics | SCI |
| 24 | Temperature of Paved Streets in Urban Mockups and Its Implication of Reflective Cool Pavements | 张毅 | 2021-04-26 | atmosphere | SCI |
| 25 | Numerical investigation on load transfer mechanism of bonded post-tensioned concrete beam-column substructures against progressive collapse | 钱凯 | 2021-01-11 | Advances in Structural Engineering | SCI |
| 26 | Nondestructive assessment of cross-laminated timber using non-contact transverse vibration and ultrasonic testing | 张璐 | 2021-01-01 | European Journal of Wood and Wood Products | SCI |
| 27 | Progressive Collapse-Resisting Mechanisms of Planar Prestressed Concrete Frame | 钱凯 | 2019-07-01 | ACI Structural Journal | SCI |
| 28 | Investigation into Resilience of Precast Concrete Floors against Progressive Collapse | 钱凯 | 2019-01-03 | ACI Structural Journal | SCI |
| 29 | 图形处理器加速算法在复杂高层结构非线性响应分析中的应用 | 李红豫 | 2018-11-01 | 工程力学 | EI |
| 30 | 活性粉末混凝土梁抗剪性能试验研究 | 王强 | 2017-05-15 | 浙江大学学报(工学版) | EI |
| 31 | 基于塑性理论的活性粉末混凝土梁抗剪承载力 | 王强 | 2017-02-23 | 同济大学学报(自然科学版) | EI |
| 32 | 考虑楼板组合效应的多层钢框架抗连续倒塌性能分析 | 钱凯 | 2021-11-05 | 建筑结构学报 | EI |
| 33 | 后浇整体式预制混凝土梁板子结构抗连续倒塌机理研究 | 钱凯 | 2020-05-26 | 建筑结构学报 | EI |
| 34 | 焊接连接预制混凝土梁-板子结构抗连续倒塌性能研究 | 李治 | 2020-10-01 | 建筑结构学报 | EI |
| 35 | 填充墙 RC 框架结构抗连续性倒塌性能数值模拟研究 | 钱凯 | 2020-09-01 | 建筑结构学报 | EI |

智慧结构材料工程技术研究中心团队

| 编号 | 论文题目 | 第一作者 | 发表时间 | 刊物 | 收录类别 |
|----|---|------|------------|-------------------------------------|------|
| 1 | New Magnitude Proxy for Earthquake Early Warning Based on Initial Time Series and Frequency | 王延伟 | 2022-01-01 | Seismological Research Letters | SCI |
| 2 | An experimental study of corrosion damage distribution of steel bars in reinforced concrete using acoustic emission technique | 虞爱平 | 2020-04-29 | Construction and Building Materials | SCI |

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|----|---|-----|------------|------------------------------------|-----|
| 3 | Monitoring of prestress and bond stress of self-sensing FBG steel strand | 朱万旭 | 2021-03-03 | Measurement | SCI |
| 4 | A New Design of Cable Anchor for Ultra-High Fatigue Stress Cable Net of Largest Telescope in the World | 朱万旭 | 2021-02-01 | Thin-Walled Structures | SCI |
| 5 | Method of Designing a Friction-Based Wedge Anchorage System for High-Strength CFRP Plates | 朱万旭 | 2021-10-27 | Materials | SCI |
| 6 | Behavior of RC Beams Strengthened Using Steel-Wire-Carbon-Fiber-Reinforced Plates | 朱万旭 | 2020-09-09 | materials | SCI |
| 7 | Range-expansion technology and fatigue performance study on the self-sensing steel strand with an embedded fibre Bragg grating sensor | 覃荷瑛 | 2020-05-03 | strain | SCI |
| 8 | An Efficient Cable-type Energy Dissipation Device for Prevention of Unseating of Bridge Spans | 邢心魁 | 2021-04-23 | structures | SCI |
| 9 | Study on axial compressive properties of RC square columns strengthened with prestressed CFRP sheets | 卢春玲 | 2020-08-12 | Structures | SCI |
| 10 | Optimizing the anchoring structure for a super large cable-net structure with improved fatigue resistance | 朱万旭 | 2020-03-27 | Advances in Structural Engineering | SCI |
| 11 | Long-Term Monitoring Reliability and Life Prediction of Fiber Bragg Grating-Based Self-Sensing Steel Strands | 覃荷瑛 | 2020-10-23 | Advances in Civil Engineering | SCI |
| 12 | Dynamic tensile behavior of steel strands at different strain rates | 邢心魁 | 2021-05-03 | structues | SCI |
| 13 | 基于分离涡方法的定日镜风效应研究 | 卢春玲 | 2021-03-30 | 太阳能学报 | EI |
| 14 | 基于分离涡方法的台北 101 大厦流固耦合风致响应分析 | 卢春玲 | 2021-03-30 | 振动与冲击 | EI |
| 15 | 基于大涡模拟的台北 101 大楼风致响应分析 | 卢春玲 | 2019-08-15 | 振动与冲击 | EI |
| 16 | 体内预应力钢绞线光纤光栅监测技术研究及其工程应用 | 朱万旭 | 2019-02-20 | 光子学报 | EI |
| 17 | 半刚性基层沥青路面疲劳裂缝扩展与寿命预估研究 | 栾利强 | 2017-09-15 | 土木工程学报 | EI |
| 18 | 港珠澳大桥节段预制桥墩高强钢筋联接锚固体系的关键技术研究 | 朱万旭 | 2017-05-15 | 铁道学报 | EI |
| 19 | 内嵌预压式大量程光纤光栅传感器的智能钢绞线的研制与性能分析 | 覃荷瑛 | 2017-04-10 | 中国激光 | EI |

科研成果获奖

| 序号 | 奖励类别 | 获奖等级 | 获奖项目名称 | 获奖人 | 获奖年度 |
|----|------------------------|------|------------------------|-----|------|
| 1 | 广西科学技术奖科学技术进步类 | 二等奖 | 预制装配式混凝土结构关键技术与智能产业化 | 钱凯 | 2021 |
| 2 | 广西科学技术奖科学技术进步类 | 一等奖 | 工业固废制备优质胶凝材料关键技术与产业化应用 | 陈平 | 2021 |
| 3 | 广西科学技术奖科学技术进步类 | 一等奖 | 珊瑚碎屑混凝土材料关键技术与工程应用 | 王磊 | 2021 |
| 4 | 教育部高等学校科学研究优秀成果奖（科学技术） | 二等奖 | 混凝土掺合料绿色制成技术创新与产业化集成应用 | 陈平 | 2019 |
| 5 | 广西科学技术奖技术发明类 | 二等奖 | 大型混凝土构件拼装连接系统的关键技术 | 朱万旭 | 2019 |