**Personal Research Projects**

| **Year** | **Research Type** | **Project Title** |
| --- | --- | --- |
| 2025–2026 (114–115) | General Research Project | R&D on Intelligent Direct-Drive Critical Equilibrium Mechanism for Disaster Relief Bridge Control Applications |
| 2023–2027 (112–116) | Bilateral Agreement / International Collaborative Research Project | Critical Equilibrium Mechanism and Intelligent Lightweight Bridge (NEMELIFT) for Urban Ecological Transportation |
| 2023 (112) | Encouragement Program for Practical Research Projects in Technical Colleges | Feasibility Assessment of Combining Wild Gardens and Retention Spaces under Adaptive Design Concepts |
| 2023 (112) | General Research Project | Study on Suburban Space Environment Improvement and Construction Benefit Analysis |
| 2021–2022 (110–111) | General Research Project | Analysis of Urban Park Landscape Elements and Environmental Comfort Factors |
| 2021 (110) | General Research Project | Assessment of Combining Street Retention Spaces with Wild Gardens as Climate Adaptation Strategy |
| 2020 (109) | General Research Project | Construction of Multivariate Quality Characteristic Process Capability Analysis for Virtual Pier Control Effectiveness Evaluation |
| 2019 (108) | General Research Project | Application of Critical Equilibrium Mechanism Automatic Control Technology to Enhance the Performance of High-Mobility Disaster Relief Bridges (Part II) |
| 2018 (107) | General Research Project | Development of Intelligent Critical Equilibrium Control Mechanism to Enhance Building Seismic Performance |
| 2018 (107) | General Research Project | Establishment of Integrated Health Risk Expert System and Cloud Data Computation Model for Smart Environmental Monitoring IoT |
| 2018 (107) | Industry-Academia Cooperative Project (Applied) | Evaluation of Permeable Pavement Structures Using Hollow PC Casting Techniques to Mitigate Urbanization Impacts |
| 2018 (107) | General Research Project | Application of Critical Equilibrium Mechanism Automatic Control Technology to Enhance the Performance of High-Mobility Disaster Relief Bridges (Part I) |
| 2017 (106) | General Research Project | Construction of Groundwater Circulation System Combined with Rooftop and Vertical Greening for Building Insulation and Thermal Efficiency |
| 2016 (105) | General Research Project | Rapid Enhancement of Arcade-Type Building Seismic Resistance Using Critical Equilibrium Control Elements |
| 2016 (105) | General Research Project | Development of Open-Source Personalized Health Risk Management and Cloud Computing Model |
| 2015 (104) | General Research Project | Real-Time Monitoring and Rapid Surveying Techniques for Structural and Slope Disasters Using Imaging and Advanced Sensing Technology |
| 2014 (103) | General Research Project | Real-Time Monitoring and Rapid Surveying Techniques for Structural and Slope Disasters Using Imaging and Advanced Sensing Technology |
| 2013 (102) | General Research Project | Real-Time Monitoring and Rapid Surveying Techniques for Structural and Slope Disasters Using Imaging and Advanced Sensing Technology |
| 2012 (101) | General Research Project | Integrated Safety Monitoring Techniques and Demonstration for Reservoirs and Hydropower Plants |
| 2012 (101) | National Science & Technology Project | Integrated Energy-Saving System Combining Building Energy Efficiency and Renewable Energy Applications |
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| 2011 (100) | General Research Project | Integrated Safety Monitoring Techniques and Demonstration for Reservoirs and Hydropower Plants |
| 2010 (099) | General Research Project | Integrated Safety Monitoring Techniques and Demonstration for Reservoirs and Hydropower Plants |
| 2010 (099) | Talent Cultivation Subsidy Project | Advanced Talent Development and Human Resource Training for Refrigeration and Air Conditioning Technology |
| 2010 (099) | General Research Project | Creation of Quality, Healthy, Energy-Saving, and Stress-Relief Living Environments |
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| 2010 (099) | National Science & Technology Project | Integrated Energy-Saving System Combining Building Energy Efficiency and Renewable Energy Applications |
| 2009 (098) | General Research Project | Application of Digital Image Techniques for Earthquake Disaster Prevention and Structural Monitoring |
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| 2009 (098) | General Research Project | Application of Digital Image Techniques for Earthquake Disaster Prevention and Structural Monitoring |
| 2008 (097) | General Research Project | Development of Image Processing Techniques for Seismic Assessment of Brick-Wall Reinforced Concrete Frames |
| 2007 (096) | General Research Project | Experimental and Optimal Design Study of Critical Equilibrium Control Mechanism |
| 2006 (095) | General Research Project | Experimental and Optimal Design Study of Critical Equilibrium Control Mechanism |
| 2005 (094) | Support for Domestic Experts Attending International Conferences | 9th International Symposium on Reliability and Quality Methods in Design |
| 2004 (093) | Support for Domestic Experts Attending International Conferences | 9th Asia-Pacific Conference on Structural and Construction Engineering |
| 2003 (092) | Graduate Student Attendance at International Conference | 10th International Conference on Advanced Manufacturing |
| 2003 (092) | Support for Domestic Experts Attending International Conferences | 8th Asia-Pacific Conference on Structural and Construction Engineering |