

Civil Engineering Specialty of the School of Architectural Engineering, Kunming University

Statistics of Representative Faculty Research Achievements over the Past Five Years

This document contains seven tables: Table 1 presents research projects led by faculty; Table 2 presents faculty industry-university-research collaborative projects; Table 3 presents papers published by faculty; Table 4 presents textbooks or monographs published by faculty; Table 5 presents authorized invention patents; Table 6 presents research awards received by faculty; and Table 7 presents standards and specifications co-authored by faculty.

Table 1 Research Projects Led by Faculty

No.	Project Title	Approving Authority	Principal Investigator	Funding (RMB 10,000)	Project Period
1	Research on Calculation Methods for Shrinkage and Creep Effects in Prestressed Continuous Composite Beams	National Natural Science Foundation of China	CHEN Xu	48	2019.01-2022.12
2	Macro- and Mesoscopic Study on Dynamic Disaster Mechanisms of Soil-Rock Mixtures in Waste Dumps under Seismic Cyclic Loading	Department of Science and Technology of Yunnan Province	DU Jun	40	2022.12-2025.11
3	Research on Spatial Construction and Digital Model Database	Department of Science and Technology of	CHEN Hongyu	10	2025.09-2028.08

	<i>Development for Vernacular Architecture in Western Yunnan Bazi Areas Driven by Digital Intelligence</i>	<i>Yunnan Province</i>			
4	<i>Study on Mechanical Characterization Models and Deformation Evolution Mechanisms of Pile-Supported Reinforced Embankments under Dynamic Loading</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>WANG Panpan</i>	<i>10</i>	<i>2025.09-2028.08</i>
5	<i>Study on Mechanical Properties and Design Theory of Concrete Columns Strengthened with CFRP Sheets and Angle Steel</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>LAN Shuwei</i>	<i>10</i>	<i>2025.09-2028.08</i>
6	<i>Study on Cumulative Damage Assessment and Replacement Prediction Methods for Buckling-Restrained Braces under Strong Earthquakes</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>WU Kechuan</i>	<i>10</i>	<i>2025.03-2028.02</i>
7	<i>Study on Functional Microorganisms for Soil Microcystin Degradation Based on DNA-SIP and Omics Technologies</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>ZHAO Xuan</i>	<i>10</i>	<i>2025.03-2028.02</i>

8	<i>Mechanisms of Enhanced Rhizosphere Degradation of PAHs by Indigenous Microorganisms</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>ZHAO Xuan</i>	<i>10</i>	<i>2024.12-2027.11</i>
9	<i>Mechanism and Forecasting Model of Citrus Evapotranspiration Water Consumption in Dry-Hot Valley Areas</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>LING Zhen</i>	<i>10</i>	<i>2024.09-2027.08</i>
10	<i>Fiber-Optic Sensing Model and Technology for Steel Bar Corrosion in Hydraulic Concrete</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>HAN Zhang</i>	<i>10</i>	<i>2024.03-2027.02</i>
11	<i>Sedimentary Characteristics, Source-to-Sink Processes and Tectonic Significance of the Triassic Strata in the Napo Basin, Southwestern Guangxi</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>XIA Lei</i>	<i>10</i>	<i>2024.03-2027.02</i>
12	<i>Study on Fabric Characteristics and Mechanical Response Properties of Dam Rockfill Materials</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>SHEN Xinggang</i>	<i>10</i>	<i>2023.09-2026.08</i>
13	<i>Equivalent Linearization Analysis Method for Multi-Degree-of-Freedom Seismic Isolation Systems</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>YU Wenzheng</i>	<i>10</i>	<i>2022.12-2025.11</i>

14	<i>Experimental Study on Seismic Performance of Buckling-Restrained Brace Energy-Dissipation Subframes</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>WU Kechuan</i>	10	<i>2022.12-2025.11</i>
15	<i>Research on Flexible High-Tensile Rubber Seismic Isolation Bearings</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>ZHANG Longfei</i>	10	<i>2021.12-2024.11</i>
16	<i>Road Performance and Dry-Wet Cycle Effects of Sand-and Lime-Modified Yunnan Laterite</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>ZHU Weiwei</i>	10	<i>2021.04-2024.03</i>
17	<i>Study on Vertical Transportation and Outdoor Landscape Renovation of Existing Multi-Story Residential Buildings in Kunming</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>WANG Tingting</i>	10	<i>2020.12-2023.11</i>
18	<i>Exploration and Research on a BIM Big Data-Based Dynamic Cost Management Model for the Construction Stage: A Case Study of the Marketing Center of the Gudian Vitality City Construction Project</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>ZHU Shuangying</i>	10	<i>2020.12-2023.11</i>

19	<i>Optimization of Optical Remote Sensing Topographic Correction Models for Complex Mountainous Terrain and Its Effects on Spatiotemporal Consistency of Vegetation Parameters</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>YANG Xu</i>	<i>5</i>	<i>2025.09-2028.08</i>
20	<i>Regional Response of Ecohydrological Effects in the Water-Receiving Area of the Central Yunnan Water Diversion Project</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>TANG Yi</i>	<i>5</i>	<i>2024.12-2027.11</i>
21	<i>Evaluation Model and Diagnostic Method for Frost Resistance of Spillway Concrete with Glass Fibers</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>HAN Zhang</i>	<i>5</i>	<i>2023.09-2026.08</i>
22	<i>Analytical Algorithm for Elastoplastic Overall Stability of Steel Structures and Mechanical Performance of CFRP Torsional Strengthening</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>LAN Shuwei</i>	<i>5</i>	<i>2021.12-2024.11</i>
23	<i>Research and Application of Seismic Performance Improvement for Damped Structures Based on Interstory Drift Utilization</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>LAN Xiang</i>	<i>5</i>	<i>2021.04-2024.03</i>

24	<i>Nitrogen Migration and Transformation in Wetland Sediments of Different Plant Communities along the Lakeshore of Dianchi Lake</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>LING Zhen</i>	5	<i>2020.12-2023.11</i>
25	<i>Lightweight Intelligent Detection Technology for River and Lake Four Disorders in Remote Sensing Images</i>	<i>National Key Laboratory of Water Disaster Prevention, Hohai University</i>	<i>HAN Zhang</i>	2	<i>2026.01-2027.12</i>
26	<i>Documentation and Research on Architectural Heritage along the Yunnan Tea-Horse Road from the Perspective of Oral History</i>	<i>Yunnan Provincial Office of Philosophy and Social Sciences</i>	<i>CHEN Hongyu</i>	2	<i>2025.04-2026.12</i>
27	<i>Research on Design and Optimization Methods for Bridge Blasting Demolition Schemes</i>	<i>Department of Science and Technology of Yunnan Province</i>	<i>MAO Dejun</i>	5	<i>2020.01-2022.12</i>

Table 2 Faculty Industry-University-Research Collaborative Projects

No.	Project Title	Partner Organization	Project Leader	Funding (RMB 10,000)	Approval Date
1	<i>Strengthening Mechanism and Long-Life Design Theory of Basalt Fiber-Reinforced Polymer for Damaged Reinforced Concrete Torsional Members</i>	<i>Zhongsheng Civil Engineering (Yunnan) Co., Ltd.</i>	<i>LAN Shuwei</i>	15	2025.11
2	<i>Experimental Study on Strength Indices and Deformation Parameters of Waste Rock from Heavy-Medium Mineral Processing</i>	<i>China Nonferrous Metals Industry Kunming Survey and Design Research Institute Co., Ltd.</i>	<i>DU Jun</i>	8.94	2025.10
3	<i>Research on Large Language Model-Based Question Answering Systems and Training Systems for UAV Operators and Industry Applications in Engineering Construction</i>	<i>Yunnan Yunlu Engineering Testing Co., Ltd.</i>	<i>MAO Dejun</i>	4.51	2025.09
4	<i>Study on Influencing Factors and Control Effects of the Geothermal Field at the Wanchang Phosphate Mine, Zhenxiong, Yunnan</i>	<i>Resource and Environment Branch, Yunnan Geology and Mineral Engineering Survey</i>	<i>LI Chenchen</i>	20	2025.09

		<i>Group Co., Ltd.</i>			
5	<i>Preliminary Design Study on the Hydraulic Works of the Huangping Xinfa Reservoir Project in Heqing County</i>	<i>Kunming Hongzhao Water Conservancy and Hydropower Engineering Design Consulting Co., Ltd.</i>	<i>ZHOU Weixia</i>	<i>14</i>	<i>2025.06</i>
6	<i>Stability Analysis of No. 1 Slag Storage Facility at the Wujiaqing Phosphogypsum Slag Yard of Yunnan Xiangfeng Jinmai Chemical Co., Ltd.</i>	<i>Yunnan Zhongkan Engineering Survey and Design Co., Ltd.</i>	<i>LI Chenchen</i>	<i>8</i>	<i>2025.06</i>
7	<i>Pile Foundation Project of Zhongtong Lianda Shushan (Phase I)</i>	<i>Yunnan Branch of Qianxinan Linfeng Labor Service Co., Ltd.</i>	<i>TANG Yi</i>	<i>12.3</i>	<i>2025.06</i>
8	<i>Technical Service for Analysis of Vernacular Architecture Construction Technologies under Special Geological Conditions in Northwestern Yunnan</i>	<i>Yunnan Tianrun Green Building Design Co., Ltd.</i>	<i>CHEN Hongyu</i>	<i>13.1</i>	<i>2025.05</i>
9	<i>Construction Organization Design Study for Dream Yunnan Yulin Lanshan Secret Realm Group III Construction Project</i>	<i>Yunnan Ningrun Construction Engineering Co., Ltd.</i>	<i>LI Xia</i>	<i>5</i>	<i>2025.05</i>
10	<i>Research on Seismic Isolation and Energy Dissipation</i>	<i>Shenzhen Penghui Intelligent Control</i>	<i>WU Kechuan</i>	<i>37.1</i>	<i>2025.05</i>

	<i>Technologies for New Construction and Reinforcement of Public Buildings</i>	<i>Technology Co., Ltd.</i>			
11	<i>Experimental Study on Particle Size Distribution Characteristics and Strength-Deformation Parameters of Coarse-Grained Soil in the Erjie Phosphate Mine Waste Dump</i>	<i>Kunming University of Science and Technology Asset Management Co., Ltd.</i>	<i>DU Jun</i>	4	2025.04
12	<i>Key Data Collection and Analysis during Isolation Retrofit Jacking and Underpinning of Building No. 1 Office Building of Yunnan Transportation Planning and Design Institute Co., Ltd.</i>	<i>Trade Union Committee of Yunnan Design Institute Group Co., Ltd.</i>	<i>ZHANG Longfei</i>	5	2024.12
13	<i>Study on Seismic Safety Evaluation in High-Intensity Areas Based on Potential Damage Energy</i>	<i>Zhongke Zhenye Engineering Technology Co., Ltd.</i>	<i>QIU Zhigang</i>	25	2024.11
14	<i>Load Testing and Deformation Characteristics Study of a Completed Pedestrian Overpass Construction Project</i>	<i>Yunnan Ruijin Engineering Quality Testing Co., Ltd.</i>	<i>YANG Yong</i>	15	2024.10
15	<i>Study on Mechanical Properties of Coarse-Grained</i>	<i>Kunming University of Science and</i>	<i>DU Jun</i>	4	2024.05

	<i>Soil and Rainfall Infiltration Stability of Waste Dumps</i>	<i>Technology Asset Management Co., Ltd.</i>			
16	<i>Preliminary Architectural Design Study for the Baoshan Modern Fishery Industrial Park Construction Project</i>	<i>Kunming Qunyun Technology Co., Ltd.</i>	<i>SHEN Xinggong</i>	16	2024.05
17	<i>Study on the Impact of Cross- River Bridges on Flood Control for the Ninglang- Yongsheng Expressway</i>	<i>Yunnan Tianhang Engineering Technology Consulting Co., Ltd.</i>	<i>WANG Shaochun</i>	45	2024.05
18	<i>Experimental Study on Key Components of Energy- Dissipation Substructures</i>	<i>Yunnan Design Institute Group Co., Ltd.</i>	<i>LAN Xiang</i>	6	2024.03
19	<i>Granular Mechanics Testing and Stability Analysis of Fill Slopes for the Waste Rock Haul Road Project at the Nanjia Waste Dump</i>	<i>Yunnan Branch of Northwest Nonferrous Survey Engineering Co., Ltd.</i>	<i>DU Jun</i>	18	2024.03
20	<i>Study on Shear Strength and Seepage Deformation Characteristics of Coarse- Grained Soil Accumulations</i>	<i>Kunming University of Science and Technology Asset Management Co., Ltd.</i>	<i>DU Jun</i>	30	2024.01
21	<i>Study on Seepage Deformation and Strength Mechanical Properties of Coarse-Grained Soil in High Fill Slopes</i>	<i>China Nonferrous Metals Industry Kunming Survey and Design Research Institute</i>	<i>DU Jun</i>	9	2024.01

		<i>Co., Ltd.</i>			
22	<i>Study on Seepage Deformation and Strength Mechanical Properties of Deep Overburden Layers in the Caojiagou Tailings Pond of Haikou Phosphorus Industry</i>	<i>China Nonferrous Metals Industry Kunming Survey and Design Research Institute Co., Ltd.</i>	<i>DU Jun</i>	<i>9.5</i>	<i>2023.10</i>
23	<i>Research on Integrated Design Methods for Seismic Isolation Structures Based on the Standard for Seismic Isolation Design of Buildings</i>	<i>Yunnan Zhenyan Seismic Mitigation Technology Co., Ltd.</i>	<i>YU Wenzheng</i>	<i>20</i>	<i>2023.06</i>
24	<i>Study on New Issues in Seismic Safety Evaluation of Engineering Sites</i>	<i>Zhongke Zhenye Engineering Technology Co., Ltd.</i>	<i>QIU Zhigang</i>	<i>10</i>	<i>2023.05</i>
25	<i>Research and Development of New Seismic Mitigation and Isolation Devices</i>	<i>Yunnan Guowei Machinery Technology Co., Ltd.</i>	<i>ZHANG Longfei</i>	<i>30</i>	<i>2023.04</i>
26	<i>Research on Key Technologies for Control and Treatment of Zero-Stress Zones in High-Rise Buildings in High-Intensity Areas</i>	<i>Beijing Huamao Zhongtian Architectural Planning and Design Co., Ltd.</i>	<i>LAN Shuwei</i>	<i>2.5</i>	<i>2023.03</i>
27	<i>Study on Dynamic Response of Slope Engineering under Earthquake Action</i>	<i>Yunnan Zhenyan Seismic Mitigation Technology Co., Ltd.</i>	<i>LI Chenchen</i>	<i>4.7</i>	<i>2022.11</i>
28	<i>Technical Consultation for the 2020-2022 Detailed</i>	<i>Southwest Nonferrous</i>	<i>ZHU Shuangying</i>	<i>6.9</i>	<i>2022.11</i>

	<i>Investigation and Risk Assessment of Geological Disasters in Key Areas of Yunnan Province</i>	<i>Kunming Survey and Design Institute Co., Ltd.</i>			
29	<i>Quasi-Static Testing of New Prefabricated Special-Shaped Steel Tube Columns</i>	<i>Kunming University of Science and Technology</i>	<i>LAN Xiang</i>	4	2022.11
30	<i>Seismic Mitigation Design for the Simulation Training Center of Zhaotong Health School</i>	<i>Yunnan Agricultural Reclamation Yutai Technology Co., Ltd.</i>	<i>LAN Xiang</i>	4.3	2022.06
31	<i>Study on Water Culture in Kunming</i>	<i>Kunming Water Affairs Bureau</i>	<i>WANG Shaochun</i>	9.8	2022.06
32	<i>Fine Model Construction and Quantity Analysis</i>	<i>Yunnan Shanghao Engineering Consulting Co., Ltd.</i>	<i>ZHU Shuangying</i>	10	2022.05
33	<i>Load Test Study of Xiaodongzi Bridge</i>	<i>Yunnan Jiaogong Engineering Information Consulting Co., Ltd.</i>	<i>MAO Dejun</i>	11	2022.04
34	<i>Experimental Study on Strength and Deformation Characteristics of Coarse-Grained Soil in the Zhonggou Tailings Pond</i>	<i>China Nonferrous Metals Industry Kunming Survey and Design Research Institute Co., Ltd.</i>	<i>DU Jun</i>	2.7	2022.04
35	<i>Tunnel Inspection under Special and Complex Geological Conditions for</i>	<i>Yunnan Yunlu Engineering Testing Co., Ltd.</i>	<i>WANG Chunhua</i>	10	2022.02

	<i>Section 2 of the Menglian-Menghai Expressway</i>				
36	<i>Long-Term Health Monitoring of Special-Structure Bridges</i>	<i>Yunnan Yunlu Engineering Testing Co., Ltd.</i>	<i>FENG Guojian</i>	<i>10</i>	<i>2022.02</i>
37	<i>Maintenance Inspection of Special-Structure Bridges including Cable-Stayed Bridges, Suspension Bridges and Arch Bridges</i>	<i>Yunnan Yunlu Engineering Testing Co., Ltd.</i>	<i>MAO Dejun</i>	<i>9</i>	<i>2022.02</i>
38	<i>Ground-Floor Column Removal and Torsional Reinforcement Retrofit Project for the Jingzaizhai Slow Bar at Gaozhuang Xishuangjing, Jinghong, Xishuangbanna</i>	<i>Yunnan Chaocheng Building Structure Reinforcement Co., Ltd.</i>	<i>LAN Shuwei</i>	<i>10</i>	<i>2021.12</i>
39	<i>Research and Development of a New Steel Tube Friction Damper</i>	<i>Yunnan Guowei Machinery Technology Co., Ltd.</i>	<i>ZHANG Longfei</i>	<i>5</i>	<i>2021.12</i>
40	<i>Research and Development of Rubber Seismic Isolation Bearings for Certain Electrical Equipment</i>	<i>Yunnan Guowei Machinery Technology Co., Ltd.</i>	<i>ZHANG Longfei</i>	<i>5</i>	<i>2021.12</i>
41	<i>Research on a General-Purpose Device for Securing, Transfer and Fall Protection in Work at Height</i>	<i>Yunnan Sinian Technology Co., Ltd.</i>	<i>LING Zhen</i>	<i>7</i>	<i>2021.12</i>
42	<i>Study on Mechanical</i>	<i>Kunming University</i>	<i>DU Jun</i>	<i>1</i>	<i>2021.11</i>

	<i>Properties of Coarse-Grained Soil in the Xiaoguanshi Limestone Mine Waste Dump</i>	<i>of Science and Technology Asset Management Co., Ltd.</i>			
43	<i>Study on Mechanical Properties of Coarse-Grained Soil in the South Pit Waste Dump of the Jiama Copper Polymetallic Mine</i>	<i>Kunming University of Science and Technology Asset Management Co., Ltd.</i>	<i>DU Jun</i>	<i>15</i>	<i>2021.09</i>
44	<i>Technical Consultation on Systematic Treatment of Common Quality Defects and Process Optimization for Cast-in-Place Box Girder Construction in Section 1 of Civil Construction Supervision Services for the Dali-Nanjian Expressway</i>	<i>Yunnan Lianjun Engineering Project Management Co., Ltd.</i>	<i>SONG Gaoli</i>	<i>1.6</i>	<i>2021.06</i>
45	<i>Technical Consultation on Construction Quality Control for High Piers in Bridge Substructures of the Binchuan-Nanjian Expressway Construction Project</i>	<i>Yunnan Yunling Expressway Engineering Consulting Co., Ltd.</i>	<i>WANG Chunhua</i>	<i>4</i>	<i>2021.05</i>

Table 3 Papers Published by Faculty

No.	Paper Title	Journal	Journal Index/Rank	Author	Publication Date
1	<i>An analytical method for determining the global buckling load of shear-braced steel frame-concrete core tube structures</i>	<i>Structures</i>	<i>SCI Q2</i>	<i>LAN Shuwei</i>	<i>2026-02-21</i>
2	<i>A Topographic Shadow Effect Correction (TSEC) Method for Correcting Surface Reflectance of Optical Remote Sensing Images in Rugged Terrain</i>	<i>Remote Sensing</i>	<i>SCI Q2</i>	<i>YANG Xu</i>	<i>2026-02-19</i>
3	<i>A Bracing Design Method for Shear-Type Strongly Braced Steel Frames Based on the Story Critical Stiffness</i>	<i>BUILDINGS</i>	<i>SCI Q3</i>	<i>LAN Shuwei</i>	<i>2026-02-07</i>
4	<i>An Analytical Model and Parameter Sensitivity Analysis of the Energy Dissipation Ratio for Nonlinear Viscous Dampers Under Seismic Excitation</i>	<i>BUILDINGS</i>	<i>SCI Q3</i>	<i>LAN Xiang</i>	<i>2026-03-05</i>

5	<i>Simplified Method for Structural Capacity and Reinforcement Design of Reinforced Concrete Circular Bridge Piers Considering Second-Order Effects</i>	TRANSPORTATION RESEARCH RECORD	SCI Q4	LAN Shuwei	2026-05-01
6	<i>Compatibility charts of BRB-VD combined systems for RC frames in ultra-high seismic intensity zones</i>	BULLETIN OF THE POLISH ACADEMY OF SCIENCES-TECHNICAL SCIENCES	SCI Q4	LAN Shuwei	2026-03-01
7	<i>The influence of scale effect on the deformation parameters of the Duncan-Chang E-μ model for coarse-grained soils: an experimental study</i>	FRONTIERS IN MATERIALS	SCI Q4	SHEN Xinggong	2025-10-29
8	<i>Boundaries and Perception: A Historical Anthropology Study on Memory Characteristics of Vernacular Settlements and Architectural Space Environments in the Zhaozhou Bazi (English)</i>	Journal of Resources and Ecology	CSCD (Core)	CHEN Hongyu	2025-11-30
9	<i>Experimental and theoretical study on flexural rigidity reduction of</i>	Scientific Reports	SCI Q3	LAN Shuwei	2025-08-11

	<i>reinforced concrete eccentric column</i>				
10	<i>Research on Urban Design Control Methods for Intermontane Basin "Bazi" City in Southwest China During Territorial Space Planning: A Case Study of Mile City, Yunnan Province</i>	<i>buildings</i>	<i>SCI Q3</i>	<i>CHEN Hongyu</i>	<i>2025-07-28</i>
11	<i>Experimental Study on the Seismic Behavior of All-Steel Buckling-Restrained Braces Without an Unbonded Material Layer</i>	<i>Buildings</i>	<i>SCI Q3</i>	<i>WU Kechuan</i>	<i>2025-05-12</i>
12	<i>The influence pattern of scale effect on coarse- grained soil particle breakage: an experimental study</i>	<i>FRONTIERS IN MATERIALS</i>	<i>SCI Q4</i>	<i>LI Xia</i>	<i>2025-05-14</i>
13	<i>Triaxial compression test of shear strength parameters of rock-fill materials considering scale effect</i>	<i>FRONTIERS IN EARTH SCIENCE</i>	<i>SCI Q4</i>	<i>LI Xia</i>	<i>2025-04-28</i>
14	<i>Comparison of Detrital Zircon Ages in the Nanpanjiang Basin, Babu- Gaoping Tectonic Belt and Northern Vietnam Block and</i>	<i>Journal of Geomechanics</i>	<i>CSCD (Core)</i>	<i>XIA Lei</i>	<i>2025-07-21</i>

	<i>Its Tectonic Significance</i>				
15	<i>Analysis of progressive collapse of low-rise concrete frame structure under double earthquake in Türkiye</i>	<i>Journal of Vibroengineering</i>	<i>EI Journal Indexed (JA)</i>	QIU Zhigang	2025-07-01
16	<i>Application of structural damage curve in seismic resistance: a case study of the Türkiye earthquake in February 2023</i>	<i>Journal of Vibroengineering</i>	<i>EI Journal Indexed (JA)</i>	QIU Zhigang	2025-07-01
17	<i>Multi-Objective Optimization Strategy for Rural River Governance in Yunnan Based on the NSGA-II Algorithm</i>	<i>Environmental Monitoring Management and Technology</i>	<i>CSCD (Extended); Peking University Core Journal</i>	HAN Zhang	2025-06-24
18	<i>Practical Algorithm for Overall Stability of High-Pier Rigid-Frame Bridges Considering the Effect of Tie Beams</i>	<i>Journal of Railway Engineering Society</i>	<i>EI Journal Indexed (JA)</i>	LAN Shuwei	2024-09-15
19	<i>Theoretical Research and Shaking Table Test on Nominal Aspect Ratio of the Isolated Step-Terrace Structure</i>	<i>Buildings</i>	<i>EI Journal Indexed (JA), SCI Q3</i>	ZHANG Longfei	2024-07-02

20	<i>Tests and Seismic Response Analysis of Guided-Rail-Type Anti-Tensile Rubber Bearing</i>	<i>Buildings</i>	<i>EI Journal Indexed (JA), SCI Q3</i>	<i>ZHANG Longfei</i>	<i>2024-03-02</i>
21	<i>Study on the Damping Efficiency of a Structure with Additional Viscous Dampers Based on the Shaking Table Test</i>	<i>Buildings</i>	<i>SCI Q3</i>	<i>LAN Xiang</i>	<i>2024-05-23</i>
22	<i>Research on Mechanical Properties of Steel-Polypropylene Fiber-Reinforced Concrete after High-Temperature Treatments.</i>	<i>APPLIED SCIENCES</i>	<i>SCI Q4</i>	<i>SHEN Xinggang</i>	<i>2024-04-30</i>
23	<i>Study on the Design Period Reduction Coefficient of Seismic Isolation Structures Based on Equivalent Linearization</i>	<i>China Earthquake Engineering Journal</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>ZHANG Longfei</i>	<i>2024-03-14</i>
24	<i>Influence of the Placement of Intermediate-Column Viscous Dampers within the Same Span on Seismic Mitigation Efficiency</i>	<i>Journal of Building Structures</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>LAN Xiang</i>	<i>2024-04-28</i>

25	<i>Adjustment Method for Elastic Time-History Analysis of Structures Considering Period Reduction</i>	<i>China Earthquake Engineering Journal</i>	<i>CSCD (Core)</i>	<i>WU Kechuan</i>	<i>2024-05-13</i>
26	<i>Short-Term Evapotranspiration Forecasting of Rubber (Hevea brasiliensis) Plantations in Xishuangbanna, Southwest China</i>	<i>Agronomy-basel</i>	<i>SCI Q2</i>	<i>LING Zhen</i>	<i>2023-03-30</i>
27	<i>Effect of dry-wet cycles on the strength and deformation of the red-bed rockfill material in western Yunnan</i>	<i>Frontiers in Earth Science</i>	<i>SCI Q3</i>	<i>DU Jun</i>	<i>2023-08-24</i>
28	<i>Experimental Study on the Reciprocating Shear Characteristics and Strength Deterioration of Argillaceous Siltstone Rockfill Materials</i>	<i>Applied Sciences-Basel</i>	<i>SCI Q4</i>	<i>DU Jun</i>	<i>2023-08-02</i>
29	<i>Experimental Study on the Effect of Coarse Grain Content on the Dilatancy and Particle Breakage Characteristics of Coarse Grained-Soils</i>	<i>Geofluids</i>	<i>SCI Q4</i>	<i>DU Jun</i>	<i>2023-04-25</i>

30	<i>A simplified method for analyzing overall stability of flexural-type braced frame structures</i>	<i>Tehnicki vjesnik- Technical Gazette</i>	<i>SCI Q4</i>	<i>LAN Shuwei</i>	<i>2023-04-24</i>
31	<i>DISTRIBUTIONAL RANGE SHIFTS IN RESPONSE TO CLIMATE CHANGE: A CASE STUDY OF CONIFER SPECIES ENDEMIC TO SOUTHWESTERN CHINA</i>	<i>APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH</i>	<i>SCI Q4</i>	<i>HUO Hong</i>	<i>2022-11-30</i>
32	<i>Particle Size Distribution Characteristics and Shear Strength Properties of High-Bench Waste Dumps</i>	<i>Mining and Metallurgical Engineering</i>	<i>CSCD (Extended), Peking University Core Chinese Journal</i>	<i>DU Jun</i>	<i>2022-12-15</i>
33	<i>Fractal Characteristics and Shear Strength Properties of Soil-Rock Mixtures in Waste Dumps</i>	<i>Geology and Exploration</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>DU Jun</i>	<i>2022-12-09</i>
34	<i>Calculation Method for the Maximum Amount of Bonded Steel Plates for RC Beams Strengthened with Bottom-Bonded Steel Plates</i>	<i>Journal of Highway and Transportation Research and Development</i>	<i>CSCD (Core), Peking University Core</i>	<i>MAO Dejun</i>	<i>2022-11-15</i>

			<i>Chinese Journal</i>		
35	<i>Analysis of Combined Seismic Mitigation and Isolation Effects for High-Rise Building Foundations in High-Intensity Areas</i>	<i>Industrial Construction</i>	<i>CSCD (Extended), Peking University Core Chinese Journal</i>	<i>YU Wenzheng</i>	<i>2022-08-03</i>
36	<i>Study on a Seismic Mitigation Design Method Based on Displacement and Shear Force Reduction Ratios</i>	<i>Earthquake Engineering and Engineering Dynamics</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>LAN Xiang</i>	<i>2023-02-15</i>
37	<i>Shaking Table Test Study on a Complex Museum Structure with Seismic Isolation and Energy Dissipation (Online First)</i>	<i>Industrial Construction</i>	<i>CSCD (Extended), Peking University Core Chinese Journal</i>	<i>LAN Xiang</i>	<i>2022-09-19</i>
38	<i>Failure Mechanism and Experimental Study of the Extended Connection Segment of Buckling-Restrained Braces</i>	<i>Advanced Engineering Sciences</i>	<i>CSCD (Core), Peking University Core</i>	<i>WU Kechuan</i>	<i>2023-09-05</i>

			Chinese Journal		
39	<i>Journal of Computational Methods in Sciences and Engineering</i>	<i>Journal of Computational Methods in Sciences and Engineering</i>	<i>EI Journal Indexed (JA)</i>	DU Jun	2023-09-01
40	<i>Analytical Method for Equivalent Rectangular Stress Coefficients of High- Strength Concrete Normal Sections</i>	<i>Engineering Journal of Wuhan University</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	CHEN Xu	2023-06-15
41	<i>Practical Algorithm for Overall Stability of Double- Column High-Pier Bridges</i>	<i>Journal of Jilin University (Engineering and Technology Edition)</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	LAN Shuwei	2023-04-22
42	<i>Machinery Changes and Challenges of Architecture and Landscape Design in the Virtual Reality Perspective</i>	<i>Journal of Robotics</i>	<i>EI Journal Indexed (JA)</i>	JIN He	2023-04-17
43	<i>Practical Algorithm for Overall Stability of Sidesway-Prevented Frames Considering Interstory</i>	<i>Journal of Harbin Engineering University</i>	<i>CSCD (Core), Peking University</i>	LAN Shuwei	2023-03-25

	Support		Core Chinese Journal		
44	Practical Algorithm for Overall Stability of Sidesway Steel Frames Based on Axial Force Weighting	Journal of Vibration and Shock	CSCD (Core), Peking University Core Chinese Journal	LAN Shuwei	2023-01-15
45	Impact of Climate Change and Rubber (<i>Hevea brasiliensis</i>) Plantation Expansion on Reference Evapotranspiration in Xishuangbanna, Southwest China	Frontiers in Plant Science	SCI Q2	LING Zhen	2022-03-03
46	Estimation of Applicability of Soil Model for Rubber (<i>Hevea brasiliensis</i>) Plantations in Xishuangbanna, Southwest China	Water	SCI Q3	LING Zhen	2022-01-19
47	Dry-wet Cycle Effect of Modified Yunnan Laterite with Sand and Quicklime Powder	Journal of Environmental Protection and Ecology	SCI Q4	ZHU Weiwei	2022-04-01
48	ENERGY BALANCE AND EVAPOTRANSPIRATION	APPLIED ECOLOGY AND ENVIRONMENTAL	SCI Q4	LING Zhen	2022-01-30

	<i>CHARACTERISTICS OF RUBBER TREE (HEVEA BRASILIENSIS) PLANTATIONS IN XISHUANGBANNA, SOUTHWEST OF CHINA</i>	<i>RESEARCH</i>			
49	<i>Study on Parameter Values of Strength Envelope Functions Based on the Code for Seismic Design of Buildings</i>	<i>China Earthquake Engineering Journal</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>YU Wenzheng</i>	<i>2022-10-08</i>
50	<i>Anti-Cracking Effect of Ivy Roots on Yunnan Laterite under Dry-Wet Cycles</i>	<i>Grassland and Turf</i>	<i>CSCD (Extended)</i>	<i>ZHU Weiwei</i>	<i>2022-04-30</i>
51	<i>Spatiotemporal variation and influencing factors of vegetation dynamics based on Geodetector: A case study of the northwestern Yunnan Plateau, China</i>	<i>Ecological Indicators</i>	<i>SCI Q2</i>	<i>HUO Hong</i>	<i>2021-07-28</i>
52	<i>Direct shear test analysis of root-soil complex considering the change of shear surface area</i>	<i>Ferroelectrics</i>	<i>SCI Q4</i>	<i>FENG Guojian</i>	<i>2021-07-20</i>
53	<i>Experimental Study on Seismic Performance of Buckling-Restrained Brace Reinforced Concrete Frames</i>	<i>Journal of Building Structures</i>	<i>CSCD (Core), Peking University</i>	<i>WU Kechuan</i>	<i>2021-12-15</i>

	<i>with Different Stiffness Ratios</i>		<i>Core Chinese Journal, EI Indexed</i>		
54	<i>Performance-Based Seismic Mitigation Design Method for Structures Combining Buckling-Restrained Braces and Viscous Dampers</i>	<i>Journal of Civil and Environmental Engineering (Chinese and English)</i>	<i>CSCD (Extended), Peking University Core Chinese Journal</i>	<i>WU Kechuan</i>	<i>2021-06-14</i>
55	<i>Discussion on Several Parameter Matching Issues for Buckling-Restrained Braces in Structural Design</i>	<i>Journal of Vibration and Shock</i>	<i>CSCD (Core), Peking University Core Chinese Journal, EI Indexed</i>	<i>WU Kechuan</i>	<i>2021-07-28</i>
56	<i>Creep Isothermal Method for Steel-Concrete Continuous Composite Beams</i>	<i>Journal of Highway and Transportation Research and Development</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>CHEN Xu</i>	<i>2021-05-01</i>
57	<i>Theoretical Study on the Bearing Capacity of Hooped, Strengthened RC Axially</i>	<i>Journal of Disaster Prevention and Mitigation Engineering</i>	<i>CSCD (Core), Peking</i>	<i>MAO Dejun</i>	<i>2021-02-15</i>

	<i>Loaded Medium-Long Columns</i>		<i>University Core Chinese Journal</i>		
58	<i>Calculation Method for Flexural Capacity of Steel Plate-Concrete Composite Strengthened RC Beams</i>	<i>Journal of Highway and Transportation Research and Development</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>MAO Dejun</i>	<i>2021-04-15</i>
59	<i>Study on an Improved Equivalent Linearization Design Method for Seismic Isolation Structures</i>	<i>Earthquake Engineering and Engineering Dynamics</i>	<i>CSCD (Core), Peking University Core Chinese Journal</i>	<i>YU Wenzheng</i>	<i>2021-04-01</i>
60	<i>Expression and Treatment of Two Kinds of Contradictory Problems in Highway Slope Engineering</i>	<i>Forest Chemicals Review</i>	<i>El Indexed</i>	<i>ZHU Weiwei</i>	<i>2021-07-01</i>

Table 4 Textbooks or Monographs Published by Faculty

No.	Title of Textbook/Monograph	Publisher	ISBN	Author	Publication Date
1	<i>Study on Second-Order Elastoplastic Bearing Capacity Calculation and Torsional Strengthening of Reinforced Concrete Columns</i>	Chongqing University Press	978-7-5689-6045-8	LAN Shuwei	2026.03
2	<i>Operational Application Guide and Design Case Analysis for Building Energy Dissipation and Seismic Mitigation Design</i>	Southeast University Press	978-7-5766-2028-3	WU Kechuan	2025.06
3	<i>Principles and Methods of Energy Dissipation and Seismic Mitigation Design for Building Structures and Practice in SAP2000</i>	Southeast University Press	978-7-5766-1558-6	WU Kechuan	2024.10
4	<i>Theory and Applications of Time-Frequency Response Spectra</i>	Jilin University Press	978-7-5768-3281-5	QIU Zhigang	2024.07
5	<i>Research on Key Technologies for Carbon Fiber-Reinforced Concrete Structures</i>	University of Electronic Science and Technology of China Press	978-7-5770-1347-3	LI Xia	2025.03
6	<i>Study on Comprehensive Management and Landscape Ecological Restoration of Ecologically Clean Small</i>	University of Electronic Science and Technology of	978-7-5770-1591-0	WANG Tingting	2025.04

	<i>Watersheds on the Western Shore of Dianchi Lake</i>	<i>China Press</i>			
7	<i>Measurement and Valuation of Highway Engineering</i>	<i>Central South University Press</i>	978-7-5487-5524-1	CHEN Xu	2024.09
8	<i>Study on Seismic Mitigation Efficiency of Structures with Additional Viscous Dampers</i>	<i>Chongqing University Press</i>	978-7-5689-4528-8	LANG Xiang	2024.05
9	<i>Research on Analytical Algorithms for the Overall Critical Force of Pure Frame and Braced Steel Frame Structures</i>	<i>Chongqing University Press</i>	978-7-5689-4444-1	LAN Shuwei	2024.04
10	<i>Architectural Design and Development under the Concept of Green Building</i>	<i>Harbin Institute of Technology Press</i>	978-7-5767-1358-9	JIN He	2024.04
11	<i>Mechanism and Experimental Study of Overturning Failure in Mountain Step-Terrace Seismic Isolation Structures</i>	<i>Chongqing University Press</i>	978-7-5689-4220-1	ZHANG Longfei	2023.12
12	<i>Research Methods in Architecture</i>	<i>Jilin University Press</i>	978-7-5768-2374-5	CHEN Hongyu	2023.10
13	<i>Equivalent Linearization Design Method for Seismic Isolation Structures</i>	<i>Wuhan University Press</i>	978-7-307-23550-2	YU Wenzheng	2023.05
14	<i>Experimental Study on Hooped Strengthening of Reinforced Concrete Medium-</i>	<i>Shanghai Jiao Tong University</i>	978-7-313-28793-9	MAO Dejun	2023.04

	<i>Long Columns</i>	<i>Press</i>			
15	<i>Study on Hydrological Processes of Plantation Ecosystems in Yunnan Province: A Case Study of Evapotranspiration Characteristics of Rubber Plantations</i>	<i>Northeastern University Press</i>	978-7-5517-3088-4	LING Zhen	2022.08

Table 5 Authorized Invention Patents of Faculty

No.	Patent Title	Inventor	Grant Date	Patent No.
1	<i>Bridge Structural Performance Degradation Assessment Method and System Based on Multi-Source Data</i>	LAN Shuwei	2026.04	ZL 2026 1 0179841.6
2	<i>Bracing Design Method for Strongly Braced Steel Frames Based on Story Critical Stiffness</i>	LAN Shuwei	2026.05	ZL 2026 1 0162020.1
3	<i>Method for Determining Mechanical Performance Parameters of Buckling-Restrained Braces Based on Experimental Data</i>	WU Kechuan	2026.04	ZL 2026 1 0162022.0
4	<i>Design Method for Equivalent Simulation Components of Wall-Connected Metal Shear Dampers</i>	WU Kechuan	2026.02	ZL 2025 1 1611117.8
5	<i>Design Method for Parameters of BRBs and Their Connecting Gusset Plates Based on Stiffness Matching</i>	WU Kechuan	2026.04	ZL 2025 1 1605258.9
6	<i>Design Method for Buckling-Restrained Braces Based on Mechanical Performance Parameters</i>	WU Kechuan	2025.10	ZL 2025 1 0804526.3
7	<i>Inspection Device and Method for In-Service Bridge Defects Based on Close-Range Photogrammetry</i>	LAN Shuwei	2024.08	ZL 2024 1 0861870.1
8	<i>Device for Testing Mechanical Properties of Carbon Fiber Sheets for Building Component Strengthening</i>	LAN Shuwei	2024.06	ZL 2024 1 0446063.3
9	<i>An Energy-Saving Rainwater Collection and Treatment System</i>	LAN Shuwei	2024.07	LU506060A

10	<i>A Method for Creating a Building Scene Model</i>	<i>CHEN Hongyu</i>	<i>2024.06</i>	<i>LU505671</i>
11	<i>Deep Sampling Device for Wetland Sediments</i>	<i>LING Zhen</i>	<i>2023.07</i>	<i>ZL 2022 1 0136882.9</i>
12	<i>Indoor Three-Dimensional Hydroponic Plant Sewage Treatment Device</i>	<i>LING Zhen</i>	<i>2023.04</i>	<i>ZL 2022 1 0137374.2</i>
13	<i>Ecological Display Device for Water Conservancy Engineering</i>	<i>LING Zhen</i>	<i>2023.07</i>	<i>ZL 2022 10 133415.0</i>
14	<i>Drainage Device for Water Conservancy Engineering</i>	<i>LING Zhen</i>	<i>2023.07</i>	<i>ZL 2022 1 0124029.5</i>
15	<i>Flexible High-Tensile, Anti-Corrosion Integrated Seismic Isolation Rubber Bearing</i>	<i>ZHANG Longfei</i>	<i>2022.09</i>	<i>ZL 2021 1 1030335.4</i>
16	<i>Wind-Resistant and Tensile-Resistant Universal Damping Component Applied to Seismic Isolation Layers</i>	<i>ZHANG Longfei</i>	<i>2022.09</i>	<i>ZL 2021 1 0513991.3</i>
17	<i>Rotary Friction Damper</i>	<i>ZHANG Longfei</i>	<i>2021.08</i>	<i>ZL 2020 1 0656085.4</i>
18	<i>Protective Device for Water Conservancy Engineering</i>	<i>LING Zhen</i>	<i>2021.10</i>	<i>ZL 2020 1 0056518.2</i>

Table 6 Research Awards Received by Faculty

No.	Project Title	Award	Award Level	Awarded Faculty	Award Date
1	<i>Application of Key Technologies for Rural Planning and Construction for Multi-Ethnic Ecological Resilience in Plateau Mountainous Areas</i>	<i>2025 Yunnan Provincial Science and Technology Progress Award</i>	<i>Second Prize</i>	<i>CHEN Hongyu, LAN Shuwei</i>	<i>2026.02</i>
2	<i>Research and Application of Key Technologies for Operational Safety Assurance of RC Bridges in Western Mountainous Areas</i>	<i>2024 Science and Technology Progress Award of China Association of Communications and Transportation</i>	<i>Second Prize</i>	<i>MAO Dejun</i>	<i>2024.02</i>

Table 7 Standards and Specifications Co-authored by Faculty

No.	Title of Standard	Standard No.	Issuing Authority	Name of Participating Faculty	Date of Issue	Effective Date
1	Technical Guidelines for Seismic Retrofit of Existing Buildings in Yunnan Province (Trial)	/	Department of Housing and Urban-Rural Development of Yunnan Province	ZHANG Longfei, YU Wenzheng	2022-05-23	2022-07-01
2	Technical Guidelines for Seismic Evaluation of Existing Buildings in Yunnan Province (Trial)	/	Department of Housing and Urban-Rural Development of Yunnan Province	ZHANG Longfei, YU Wenzheng	2022-05-23	2022-07-01
3	Construction Details for Seismic Isolation of Buildings	Dian 20G9-1	Department of Housing and Urban-Rural Development of Yunnan Province	ZHANG Longfei	/	2021-01-01
4	Technical Specification for Application of Building Seismic Energy Dissipation	DBJ 53/T-125-2021	Department of Housing and Urban-Rural Development of Yunnan Province	YU Wenzheng	/	2022-01-01
5	Technical specification for seismic mitigation of loading-bearing and energy-dissipating	T/CECS 900-2021	China Association for Engineering Construction Standardization	WU Kechuan	2021-10-15	2022-03-01

6	<i>Standard for Signage of Seismic Isolation and Energy Dissipation Buildings in Yunnan Province</i>	<i>DBJ 53/T-70-2025</i>	<i>Department of Housing and Urban-Rural Development of Yunnan Province</i>	<i>ZHANG Longfei</i>	<i>/</i>	<i>2025-12-01</i>
7	<i>Technical Specification for Flexible Pipeline of Seismic Isolation Buildings in Yunnan Province</i>	<i>DBJ 53/T-184-2025</i>	<i>Department of Housing and Urban-Rural Development of Yunnan Province</i>	<i>LANG Xiang</i>	<i>/</i>	<i>2025-12-01</i>