

表 1 水利工程学院近五年（2019-2023）承担各类纵向科研项目汇总

序号	名称	项目来源	负责人
1	不同类型超采区主要作物限水优产高效灌溉制度	国家重点研发计划子课题	杨路华
2	城区段河道水质改善技术与研究	十三五国家科技重大专项项目子课题	李绍飞
3	天津农业水利现代化与智慧灌溉技术帮扶项目	国家人社部专家服务基层示范项目	杨路华
4	灌溉条件向盐碱土壤水盐变异特征及作物生长响应	国家自然科学基金项目	周青云
5	新疆膜下滴灌花生根系构型对水氮分布特征的响应机制	国家自然科学基金项目	申孝军
6	滨海典型区地下水对海绵城市建设的响应与约束及其 LID 设施优化设计	国家自然科学基金项目	张茜
7	水源地域面源污染模拟与来源解析	国家自然科学基金项目	王艾
8	高压电脉冲破岩的动力学机理与精细化多场耦合数值方法研究	国家自然科学基金项目	李琴
9	天津滨海平原区智慧灌区关键技术研发与示范	水利部重大科技专项项目	郑志伟
10	滨海盐碱地节水抑盐控排量化灌排关键技术	科技部	申孝军
11	盐碱地大豆水肥盐调控及其土壤质量提升关键技术集成与示范	河北省重点研发计划项目	薛铸
12	智慧灌溉技术	天津市人社局项目、团队重点项目	孙书洪
13	农业智慧用水与农村水安全	天津市特色学科群项目	杨路华
14	基于水肥一体化的农业智慧灌溉技术应用	市农委农业科技成果转化与推广	杨路华

	用于推广	项目	
15	设施果蔬立体节水协同调控技术示范	市农委农业科技成果转化与推广项目	周青云
16	预制钢筋混凝土梁-钢管混凝土柱装配节点抗震性能研究	河北省教育厅高等学校自然科学研究重点项目	解咏平
17	钢筋混凝土框架空间节点核芯区抗震性能尺寸效应及设计方法研究	河北省自然科学基金面上项目	解咏平
18	强震作用下串联隔震结构非线性时变力学行为与时变性能评价方法研究	天津市自然科学基金面上项目	赵丽洁
19	温室滴灌经济灌水技术研究	天津市科委项目	王仰仁
20	有限供水条件下农田精准灌溉技术及装备研发	天津市科委项目	郑志伟
21	作物灌溉需求诊断与决策	技术创新引导专项(基金)企业科技特派员项目	王仰仁
22	基于 CFD 的生态温室大棚结构优化与热通风系统研究	技术创新引导专项(基金)企业科技特派员项目	陈弘

表 2 水利工程学院近五年（2019-2023）科技成果奖励情况

序号	获奖项目	奖励类别	获奖人
1	半干旱区精准高效灌溉关键技术及装备研究与应用	山西省科技进步二等奖	王仰仁
2	计划用水管理评估模型构建与应用研究	水利部农业节水科技一等奖	王冰
3	蒸散发监测布设方法与数据采集标准化	水利部农业节水科技二等奖	周青云

4	山东省德州市潘庄现代灌区发展规划（2016-2030）	水利部农业节水科技三等奖	杨路华
5	河北平原大田作物节水减氮技术及应用	河北省科技进步三等奖	杨路华
6	北斗/GNSS 水利工程安全组网监测与洪灾遥感智能识别关键技术	中国卫星导航定位科技进步二等奖	王旭

表 3 水利工程学院近五年（2019-2023）公开发表高质量论文情况

序号	第一作者姓名 (或通讯作者)	论文题目	刊物名称	期刊类别
1	张茜	Evaluation of comprehensive benefits of sponge cities using meta-analysis in different geographical environments in China	Science of the Total Environment	SCI 一区
2	周青云	Production limits analysis of rain-fed maize on the basis of spatial variability of soil factors in North China	Precision Agriculture	SCI 一区
3	王艾	Spatiotemporal variation in nitrogen loads and their impacts on river water quality in the upper Yangtze River basin	Journal of hydrology	SCI 一区
4	蒋磊	Upscaling evapotranspiration from the instantaneous to the daily time scale: Assessing six methods including an optimized coefficient based on worldwide eddy covariance flux network	Journal of Hydrology	SCI 一区

5	韩信	Real-time methods for short and medium-term evapotranspiration forecasting using dynamic crop coefficient and historical threshold	Journal of Hydrology	SCI 一区
6	李琴	A three-phase coupled numerical model for the hydraulic fracturing of rock	International Journal of Rock Mechanics and Mining Sciences	SCI 一区
7	韩信	The effect of time scales on the distribution of evapotranspiration and driving factors in desert grasslands	Agricultural Water Management	SCI 一区
8	董艳慧	A new assessment method for the vulnerability of confined water: W-F &PNN method	Journal of Hydrology	SCI 一区
9	金建华	Improved stratified sampling strategy for estimating mean soil moisture based on auxiliary variable spatial autocorrelation	Soil & Tillage Research	SCI 一区
10	余萍	Response of Ecosystem Gross Primary Productivity to Drought in Northern China Based on Multi-source Remote Sensing Data	Journal of Hydrology	SCI 一区
11	王艾	Understanding the spatiotemporal variability in nonpoint source nutrient loads and its effect on water quality in the upper Xin'an river basin, Eastern China	Journal of Hydrology	SCI 一区
12	杨路华	Effects of Flow Path Geometrical Parameters on the Hydraulic Performance of Variable Flow Emitters at the Conventional Water Supply Stage	Agriculture	SCI 二区
13	杨路华	Analysis of Flow Channel Structure Parameter and Optimization Study on Tooth Spacing of Drip Irrigation Tape	Water	SCI 二区

14	李松敏	Dynamic Interception Effect of Internal and External Nitrogen and Phosphorus Migration of Ecological Ditches	Water	SCI 二区
15	李松敏	Correlating Microbial Community Characteristics with Environmental Factors along a Two-Stage Biological Aerated Filter	Water	SCI 二区
16	李松敏	Preferable Adsorption of Nitrogen and Phosphorus from Agricultural Wastewater Using Thermally Modified Zeolite–Diatomite Composite Adsorbent	Water	SCI 二区
17	李松敏	Study on the Law of Harmful Gas Release from <i>Limnoperna fortunei</i> (Dunker 1857) during Maintenance Period of Water Tunnel Based on K-Means Outlier Treatment	applied sciences	SCI 二区
18	余萍	Water Purification Effect of Ecological Floating Bed Combination Based on the Numerical Simulation	Sustainability	SCI 二区
19	余萍	Optimization of a flood diversion gate scheme in flood storage and detention areas based on flood numerical simulation	Frontiers in Environmental Science	SCI 二区
20	申孝军	Real-time methods for short and medium-term evapotranspiration forecasting using dynamic crop coefficient and historical threshold	Agriculture	SCI 二区
21	余萍	Study on seasonal floating treatment wetland combination water purification based on numerical simulation	Journal of Water Process Engineering	SCI 二区
22	蒋磊	Remote Sensing-Based Assessment of the Water-Use Efficiency of Maize over a Large, Arid, Regional Irrigation District	remote sensing	SCI 二区

23	王旭	Modelling the hydraulic characteristics of diaphragm fishways and the effects on fish habitats	Frontiers in Environmental Science	SCI 二区
24	赵丽洁	Analysis of axial compression performance of concrete stub column with crb600h stirrups	Buildings	SCI 三区
25	张茜	Design and spatial pattern optimization for a sponge city using factor analysis and geographical statistics to restore urban resilience: A case study in a coastal area of China	Water Science and Technology	SCI 三区
26	郭小英	Transcriptomic Analysis Revealed Key Defense Genes and Signaling Pathways Mediated by the Arabidopsis thaliana Gene SAD2 in Response to Infection with Pseudomonas syringae pv. Tomato DC3000	International Journal of Molecular Sciences	SCI 二区
27	王旭	Numerical Modeling of the Dispersion Characteristics of Pollutants in the Confluence Area of an Asymmetrical River	Water	SCI 二区
28	申孝军	Underlying mechanisms of exogenous substances involved in alleviating plant heat stress	Plant stress	SCI 二区
29	申孝军	Effects of different water and nitrogen supply modes on peanut growth and water and nitrogen use efficiency under mulched drip irrigation in Xinjiang	Plants	SCI 二区
30	申孝军	Plot Layout Method of Field Experiment for Wheat with Border Irrigation Based on Soil Water Content Heterogeneity	Agronomy	SCI 二区
31	李琴	A 3D grain-based reconstruction method from a 2D surface image for the Distinct Lattice Spring Model	International Journal For Numerical And Analytical Methods In Geomechanics	SCI 二区

32	张茜	Design and spatial pattern optimization for a sponge city using factor analysis and geographical statistics to restore urban resilience: A case study in a coastal area of China	Water Science and Technology	SCI 三区
33	张茜	Research on Operation Efficiency Prediction and Optimization of Biological Retention System Based on GA-BP Neural Network Model	Sustainability	SCI 三区
34	张茜	Groundwater Vulnerability Assessment and Protection Strategy in the Coastal Area of China: A GIS-Based DRASTIC Model Approach	Applied sciences	SCI 三区
35	李松敏	Study on the Purification of Pollutants from Rainfall Runoff by Prefabricated Improved Multi-aggregate Ecological Concrete (IMAEC) Revetment	International Journal of Environmental Research	SCI 三区
36	韩娜娜	Rapid Diagnosis of Nitrogen Nutrition Status in Summer Maize over Its Life Cycle by a Multi-Index Synergy Model Using Ground Hyperspectral and UAV Multispectral Sensor Data	Atmosphere	SCI 三区
37	蒋磊	基于遥感蒸散发的区域作物估产方法	农业工程学报	EI 期刊
38	杨路华	薄壁微喷带喷洒宽度模型构建	农业工程学报	EI 期刊
39	赵丽洁	串联隔震构件非线性力学性能试验研究	振动与冲击	EI 期刊
40	李松敏	Effect of Plants Combination in Purifying Farmland Drainage	Computer and Computing Technologies in Agriculture X	EI 期刊
41	蒋磊	基于地面观测和 Sentinel-2 数据的玉米实际蒸散发估算	农业机械学报	EI 期刊
42	金建华	基于有效含水量的土壤水分监测点布设的空间分层采样方法	农业工程学报	EI 期刊

43	申孝军	气候变化对新疆膜下滴灌花生适宜播期的影响	农业工程学报	EI 期刊
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