

重庆大学环境与生态学院

科研简报

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一、学术获奖

序号	获奖名称	单位排名	获奖人	获奖类别	获奖等级
1	绿色高效混凝耦合催化臭氧氧化深度处理关键技术研发与集成应用	2	郑怀礼, 李宏	中国产学研合作创新成果奖	二等奖

二、科研论文

2026 年 1-3 月学院发表各类学术论文 86 篇，其中 SCI 期刊收录 76 篇，含自然指数期刊 18 篇。JCR 一区论文 69 篇，二区论文 7 篇。

序号	论文题目	期刊名称	出版时间	参与作者	JCR 分区
1	Synergistic Light-Thermal-Mass Engineering of Metal-Coordinated Covalent Organic Framework Membranes for Water Purification	ADVANCED FUNCTIONAL MATERIALS	2026-03-01	肖子杰	一区
2	A Stacking Ensemble Model for K OC Prediction and Environmental Mobility Assessment of Global Neutral Chemicals	ENVIRONMENTAL SCIENCE & TECHNOLOGY	2026-03-30	于清淼*, 耿金菊*	一区
3	Soil Organic Matter Modulation during Redox Oscillations: Insights from Iron Speciation and Microbial Metabolism	ENVIRONMENTAL SCIENCE & TECHNOLOGY	2026-01-01	李金择, 古励*, 艾海男*	一区
4	An Improved Model for the Gas-Particle Partitioning of Polycyclic Aromatic Hydrocarbons: Multiple Thermodynamic Interactions With Carbonaceous Aerosols	JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES	2026-02-01	王锋文*	二区
5	Wild vegetables contribute to improving the diversity and sustainability of vegetable diets in China	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	2026-03-01	杨永川	一区
6	Making waves: Overcoming toxicity and deactivation challenges in polymerization-based wastewater treatment	WATER RESEARCH	2026-01-01	段丕俊, 陈飞*	一区
7	A prior knowledge-enhanced Transformer model for data anomaly identification and processing in industrial park wastewater treatment plants	WATER RESEARCH	2026-02-01	晏鹏, 陈猷鹏*	一区
8	Computer vision-assisted sorting and selective cultivation of high-activity anammox granules	WATER RESEARCH	2026-01-01	陈猷鹏*	一区
9	Underestimated risks of conjugated estrogens in wastewater: New insights into	WATER RESEARCH	2026-02-01	于清淼, 耿金菊*	一区

	transformation products and mass balance				
10	Long-term exposure to biodegradable polylactic acid microplastics promotes <i>Microcystis aeruginosa</i> proliferation	WATER RESEARCH	2026-03-01	李宏*	一区
11	Deciphering the quorum sensing driven microbial coordination underlying anaerobic digester foaming	WATER RESEARCH	2026-01-01	李蕾*,彭绪亚,王小铭	一区
12	Breaking the permeability-selectivity trade-off in loose nanofiltration: Zwitterionic layer-by-layer membranes for superior antifouling dye/ salt separation	WATER RESEARCH	2026-03-01	刘彩虹*,何强	一区
13	Architecting asymmetrical Janus membrane for robust membrane distillation desalination with enhanced anti-fouling performance	WATER RESEARCH	2026-01-01	刘彩虹*,何强	一区
14	Quinone structure regulates sulfide-driven reactive oxygen species generation for aquatic pollutant degradation	WATER RESEARCH	2026-01-01	赵汉卿,程鸿,丁阿强,张代钧,卢培利*	一区
15	Nanoscale zero-valent iron coupled with microorganisms enhances the removal of organochlorine pesticides in groundwater: Insights from the role of cascading effects and horizontal gene transfer	WATER RESEARCH	2026-01-01	王翔*	一区
16	Nationwide occurrence and flux estimates of PFAS in leachate from waste-to-energy sector: an emerging reservoir linked to short-term waste storage	WATER RESEARCH	2026-02-01	王心月,智悦,王前,王小铭*	一区
17	The retention mechanism of the adherent iron corrosion pipe scale on polystyrene nanoplastics in drinking water distribution systems	WATER RESEARCH	2026-03-01	姚娟娟*	一区
18	Inducing an energy management crisis to combat bacterial biofilms: The mechanism of D-proline and sodium nitroprusside	WATER RESEARCH	2026-02-01	赵彬*,安强,陈磊	一区
19	Biochar derived from plant waste improves seedling growth by influencing the physical structure and nutrient content of simulated lunar soil	ACTA ASTRONAUTICA	2026-01-01	谢更新*	一区
20	Enrichment methodology for target algal species using reaction kinetics: A case study of <i>Limnothrix</i> sp.	ALGAL RESEARCH-BIOMASS BIOFUELS AND BIOPRODUCTS	2026-01-01	方芳,晏鹏,陈猷鹏,郭劲松*	一区
21	Short mowing before flooding enhanced root phosphorus mobilisation via catalase and alkaline phosphatase activity	APPLIED SOIL ECOLOGY	2026-02-01	蒋艳雪*,郭劲松	一区
22	Multi-omics evidence reveals acetogenesis as the primary metabolic bottleneck under	BIORESOURCE TECHNOLOGY	2026-03-01	李蕾,彭绪亚	一区

	ammonia stress				
23	Linking carbon, nitrogen and sulfur cycles: Electron transfer model for nitrate and sulfate dependent anaerobic oxidation of methane	BIORESOURCE TECHNOLOGY	2026-03-01	聂文博	一区
24	Simultaneous and efficient removal of carbon, nitrogen, and phosphorus by <i>Pseudomonas mendocina</i> MGAD-04 under aerobic conditions: Performance and mechanism	BIORESOURCE TECHNOLOGY	2026-01-01	王圃	一区
25	Enhancement of denitrification in constructed wetlands microbial fuel cells at low temperature: performance and molecular mechanisms	BIORESOURCE TECHNOLOGY	2026-02-01	陈一*	一区
26	Quorum sensing enhanced dissimilatory nitrate reduction to ammonia processes in constructed wetland-microbial fuel cells	BIORESOURCE TECHNOLOGY	2026-02-01	聂文博,李俊,瞿涵,陈一*	一区
27	Hematite-facilitated anaerobic oxidation of organics: Novel strategy to alleviate bioclogging in constructed wetlands	BIORESOURCE TECHNOLOGY	2026-01-01	聂文博,瞿涵,李俊,陈一*	一区
28	Intelligent temporal causal inference framework for wastewater treatment plant nitrogen removal: Multi-stage spurious causal elimination	BIORESOURCE TECHNOLOGY	2026-01-01	何强,程呈,程鸿*	一区
29	Long-term enhanced nitrogen removal and power generation in high-salinity ammonium-rich wastewater treatment via heterotrophic nitrifying-aerobic denitrifying bacteria-functionalized biocathodes	BIORESOURCE TECHNOLOGY	2026-02-01	付国楷*	一区
30	Optimizing bioretention nitrogen control: woodchip mulching as vadose zone-focused amendment for pyrite systems	BIORESOURCE TECHNOLOGY	2026-02-01	马海元*,柴宏祥	一区
31	Role of N-acyl homoserine lactone mediated quorum sensing in regulating transformation of <i>Sphaerotilus natans</i> single cells to filamentous growth during filamentous sludge bulking	BIORESOURCE TECHNOLOGY	2026-01-01	陈猷鹏,晏鹏*,郭劲松	一区
32	Strategic and diversified soil microbes: Unraveling the belowground control of plant multidiversity-productivity relationships across elevation	CATENA	2026-01-01	李俊	一区
33	Anammox community characteristics and stable relationships centered on anammox bacteria	CHEMICAL ENGINEERING JOURNAL	2026-01-01	高梦娇,晏鹏,陈猷鹏*	一区
34	Mechanism of anaerobic digestion of cattle manure enhanced by oxygen and hydrogen nano-bubble water	CHEMICAL ENGINEERING JOURNAL	2026-01-01	李蕾*,彭绪亚	一区

35	Graphene modified fibers for UV-induced photocatalytic removal of cyanobacterial bloom	CHEMICAL ENGINEERING JOURNAL	2026-02-01	李伟*	一区
36	Efficient in situ chemical oxidation of petroleum hydrocarbons in soil by foaming percarbonate	CHEMICAL ENGINEERING JOURNAL	2026-03-01	刘元元*	一区
37	Environmental fate of phthalate acid esters in shale gas exploitation areas: Adsorption, degradation, and vadose zone transport dynamics	ENVIRONMENTAL POLLUTION	2026-01-01	卢培利*,张代钧	一区
38	The microbial response to biodegradable polylactic acid microplastics during anaerobic fermentation of waste activated sludge	ENVIRONMENTAL RESEARCH	2026-03-01	古励,何强,李麟*	一区
39	Forest layer structure and functional trait heat-tolerance: The critical role of grass coverage in subtropical forest to extreme heat events	FOREST ECOLOGY AND MANAGEMENT	2026-02-01	杨永川*	一区
40	The role of foam stabilizers, nano-seeds, and additives in modulating microstructure, insulation property, and mechanical strength of CO ₂ foamed concrete	JOURNAL OF BUILDING ENGINEERING	2026-02-01	陈志良	一区
41	Unveiling mechanisms governing heavy metal leaching from solid waste-vitrified glasses for cleaner resource recovery	JOURNAL OF CLEANER PRODUCTION	2026-01-01	王心月,陈志良*	一区
42	The dual role of microplastics in anaerobic digestion of food waste: Enhancing hydrolysis but inhibiting methanogenesis via biofilm-mediated microbial community succession	JOURNAL OF CLEANER PRODUCTION	2026-02-01	陈柯锦,张利兰,李宏,黄川*	一区
43	Picolinic acid enhances ultrafiltration performance in surface water treatment by promoting the Mo(IV)/peroxymonosulfate system	JOURNAL OF COLLOID AND INTERFACE SCIENCE	2026-02-01	张冰*,时文歆	一区
44	Novel high-resolution data to unravel distribution, mechanisms and anthropogenic threats to freshwater macrophytes worldwide	JOURNAL OF ECOLOGY	2026-02-01	杨永川	一区
45	Optimizing partial nitrification-anammox in a membrane aerated moving bed biofilm reactor for mainstream nitrogen removal	JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING	2026-02-01	许劲*	一区
46	Deciphering the impacts of multi-source materials on semi-continuous anaerobic digestion of food waste: performance enhancement and mechanism analysis	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2026-02-01	古励	一区
47	From facility selection to real-time scheduling: An SWMM-MPC framework for urban drainage control under extreme rainfall	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2026-03-01	陈磊*,何强,柴宏祥	一区

48	Impact of anaerobic time on aerobic granular sludge performance: Insights from extracellular polymeric substances and microbial community perspectives	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2026-01-01	郭劲松,方芳*	一区
49	Visible light photocatalytic enhanced heterogeneous cobalt catalyzed peroxydisulfate synergistic process to degradation atrazine: Efficiency, influencing factors, by-products removal and mechanism	JOURNAL OF ENVIRONMENTAL SCIENCES	2026-01-01	晏鹏	一区
50	Salt and ammonia exposure response and bioaugmentation mechanism in anaerobic digestion of food waste	JOURNAL OF ENVIRONMENTAL SCIENCES	2026-03-01	彭绪亚,李蕾*	一区
51	Synchronous pre-oxidation-coagulation for the efficient treatment of organic compounds by UV/sodium percarbonate	JOURNAL OF ENVIRONMENTAL SCIENCES	2026-02-01	时文歆*,张冰	一区
52	Does seed size determine species resilience?	JOURNAL OF FORESTRY RESEARCH	2026-02-01	杨永川*	一区
53	Atmospheric formaldehyde, acetaldehyde, and acetone in five major Chinese cities: Photochemical characteristics, sources, and joint ozone-carbonyl control strategies	JOURNAL OF HAZARDOUS MATERIALS	2026-01-01	王锋文	一区
54	Chemical durability and leaching mechanisms of simulated radioactive glass waste forms for the early stage	JOURNAL OF HAZARDOUS MATERIALS	2026-02-01	王心月,张曾宇, 陈志良*	一区
55	Emerging contaminants in sediments of a tributary to the Yangtze river in the Three Gorges Reservoir Area: Fate, ecological risk assessment, and prioritization for management	JOURNAL OF HAZARDOUS MATERIALS	2026-01-01	邵迎,陈忠礼*	一区
56	Freezing switches the predominant mechanism of DOMs-mediated Cr(VI) reduction from complexation and photocatalysis to ice-crystal confinement effect	JOURNAL OF HAZARDOUS MATERIALS	2026-03-01	梁嘉良,李芸邑*	一区
57	Mechanism of sono-induced nitrosation side reactions and formation of toxic nitrosamine by-products: Kinetics and QSAR	JOURNAL OF HAZARDOUS MATERIALS	2026-03-01	姚娟娟*,张智,姜文超	一区
58	Unraveling the synergistic impact of calcium ions and pH on the rejection of per-and perfluoroalkyl substances by nanofiltration in complex water matrices	JOURNAL OF HAZARDOUS MATERIALS	2026-01-01	刘彩虹*,智悦*,何强	一区
59	Distinct fouling behavior tuned by two membrane-foulant interactions: contribution of electrostatic and hydrophobic effect	JOURNAL OF MEMBRANE SCIENCE	2026-01-01	韩旻媛,姚婧梅, 韩乐*	一区
60	Focus on the toxicology of deep-	MARINE ENVIRONMENTAL	2026-01-01	张利兰*	一区

	sea mining: Biototoxicity of heavy metals to <i>Vibrio fischeri</i> released from disturbed surface sediments of the western Clarion-Clipperton zone, Pacific Ocean	RESEARCH			
61	Breaking data silos: A new modeling method based on knowledge transfer-enhanced between wastewater treatment plants	PROCESS SAFETY AND ENVIRONMENTAL PROTECTION	2026-01-01	陈猷鹏	一区
62	Evolution pathway of heavy metal speciation during ultrasonic carbonation and subsequent cementitious utilization of MSWI fly ash	PROCESS SAFETY AND ENVIRONMENTAL PROTECTION	2026-02-01	陈志良,王心月*	一区
63	Metagenomics reveals the role of micron zero-valent iron in semi-continuous anaerobic digestion of food waste: The non-negligible impact of organic loading rate	RENEWABLE ENERGY	2026-03-01	古励	一区
64	Balancing rice production and greenhouse gas mitigation: assessing the feasible potential of agricultural practices	RESOURCES CONSERVATION AND RECYCLING	2026-02-01	杨易	一区
65	Acetate-driven selectivity in trace Co(II)/PMS systems: Dominant role of Co (III)-acetate complexes in pollutant removal	SEPARATION AND PURIFICATION TECHNOLOGY	2026-02-01	梁嘉良	一区
66	Calcium modification in food waste digestate derived granular biochar: unveiling synergistic mechanisms for phosphorus recovery	SEPARATION AND PURIFICATION TECHNOLOGY	2026-02-01	王前	一区
67	Machine learning prediction of reactive species exposure of UV/H ₂ O ₂ in natural waters: Unveiling the Ghost Radical	SEPARATION AND PURIFICATION TECHNOLOGY	2026-02-01	梁嘉良,李芸邑*	一区
68	Predicting the environmental risks of potentially toxic metal(loid)s in mechanochemically treated fly ash using machine learning	WASTE MANAGEMENT	2026-01-01	陈志良	一区
69	Enhanced Visible-Light-Driven Peroxydisulfate Activation by a Waste-Derived Fly Ash-Supported TiO ₂ /BiO _{1-x} Br _{0.5} I _{0.5} Photocatalyst for Degradation of Sodium Isopropyl Xanthate	ACS ES&T WATER	2026-01-09	石德智*	一区
70	Deep learning-based screening of zebrafish embryo malformations for assessing the developmental toxicity and EC50 estimation of disinfection by-products	JOURNAL OF HAZARDOUS MATERIALS ADVANCES	2026-02-01	高俊敏*	一区
71	Plant uptake and air-soil exchange of PAHs on university campuses: A tale of species differences, mechanisms and seasonal variation	ATMOSPHERIC ENVIRONMENT	2026-03-01	王锋文*	二区
72	Soil Fauna Alter the Relationship Between Plant Litter Diversity and Microbial Communities in Mixed	ECOLOGY AND EVOLUTION	2026-01-01	林敦梅*	二区

	Litter Decomposition				
73	Unraveling the contamination, source and health risk of per- and polyfluoroalkyl substances in PM2.5 during winter from a southwestern city in China	ENVIRONMENTAL SCIENCE- PROCESSES & IMPACTS	2026-01-01	卢培利,王锋文*	二区
74	Temporal Variation of Arbuscular Mycorrhizal Fungi and Glomalin-Related Soil Proteins in Citrus Orchards of Different Planting Durations	LAND DEGRADATION & DEVELOPMENT	2026-01-01	李俊	二区
75	A Critical Review on Desalination Technologies for High-Salinity Wastewater: Development and Challenges	MEMBRANES	2026-01-01	刘彩虹*	二区
76	Effects of Bamboo (<i>Bambusa emeiensis</i>) Expansion on Soil Microbial Communities in a Subtropical Evergreen Broad-Leaved Forest	SUSTAINABILITY	2026-01-01	赵亮*	二区

三、数据分析

