

重庆大学环境与生态学院

科研简报

2025 年第 1 期（总第 29 期）

研究生办公室编

二〇二五年三月

目 录

一、 科研论文.....	-1-
二、 授权专利.....	-5-
三、 数据分析.....	-6-

一、科研论文

2025 年 1-3 月学院发表各类学术论文 51 篇，其中 JCR 一区论文 40 篇（自然指数期刊论文 8 篇），二、三区及四区论文 6 篇。。

序号	论文题目	期刊名称	出版时间	参与作者	JCR 分区
1	Enhanced Release and Reactivity of Soil Water-Extractable Organic Matter Following Wildfire in a Subtropical Forest	ENVIRONMENTAL SCIENCE & TECHNOLOGY	2025-03-01	马华*,崔福义	一区
2	Comammox rather than AOB dominated the efficient autotrophic nitrification-denitrification process in an extremely oxygen-limited environment	WATER RESEARCH	2025-01-01	柴宏祥*	一区
3	In-depth analysis of the roles and mechanisms of sulfate radical and hydroxyl radical in the degradation of metal-cyanide complexes	WATER RESEARCH	2025-01-01	魏云梅*,梁嘉良	一区
4	Enhance Fe(III) reduction in sludge fermentation for vivianite formation using exogenous H ₂ assisted by activated carbon	WATER RESEARCH	2025-01-01	古励*	一区
5	Structure-activity relationship between crystal plane and pyrite-driven autotrophic denitrification efficacy: Electron transfer and metagenome-based microbial mechanism	WATER RESEARCH	2025-01-01	周健,何强	一区
6	Improved anaerobic digestion of food waste under ammonia stress by side-stream hydrogen domestication	WATER RESEARCH	2025-01-01	古励*	一区
7	Enhancing rejection of short-chain per- and polyfluoroalkyl substances by tailoring the surface charge of nanofiltration membranes	WATER RESEARCH	2025-03-01	智悦,韩乐,柴宏祥,何强,刘彩虹*	一区
8	Improved ultrafiltration performance through dielectric barrier discharge/sulfite pretreatment: Effects of water matrices and mechanistic insights	WATER RESEARCH	2025-01-01	张冰*	一区
9	d-band center modulated water molecule adsorption and activation towards highly photocatalytic toluene mineralization	APPLIED CATALYSIS B-ENVIRONMENT AND ENERGY	2025-02-01	刘元元*	一区
10	Impacts of meteorology and emission reductions on haze pollution during the lockdown in the North China Plain	ATMOSPHERIC CHEMISTRY AND PHYSICS	2025-02-01	王锋文	一区
11	Seasonal variation and inhalation health risk of atmospheric polyfluoroalkyl and perfluoroalkyl substances in a metropolitan city	ATMOSPHERIC ENVIRONMENT	2025-02-01	王锋文*	一区

	centre of southwest China				
12	The phase state and viscosity of organic aerosol and related impacts on atmospheric physicochemical processes: A review	ATMOSPHERIC ENVIRONMENT	2025-02-01	陈静*	一区
13	Potential roles of quorum quenching in microbial aggregates during wastewater treatment	BIORESOURCE TECHNOLOGY	2025-03-01	陈猷鹏,郭劲松,晏鹏*	一区
14	Enhancing the adaptation of anammox bacteria at low temperature: Alleviating the oxidative damage to anammoxosome membrane by ascorbic acid	CHEMICAL ENGINEERING JOURNAL	2025-02-01	陈猷鹏,晏鹏*	一区
15	A systematic review of accelerated carbonation technology for municipal solid waste incineration fly ash: Carbon sequestration, reuse and heavy metal risk assessment	CHEMICAL ENGINEERING JOURNAL	2025-03-01	陈志良	一区
16	Effect of capsaicin on anaerobic lactic acid production from food waste	CHEMICAL ENGINEERING JOURNAL	2025-03-01	古励,何强,李麟*	一区
17	Spatiotemporal land use dynamics filter life history strategies to shape urban spontaneous plant assemblages	ECOLOGICAL APPLICATIONS	2025-01-01	钱深华*	一区
18	Global supply chain drivers of scarce water caused by grain production in China	ENVIRONMENTAL IMPACT ASSESSMENT REVIEW	2025-01-01	庞明月	一区
19	Nano-biochar reduces sustainable remediation of cadmium-contaminated soil more than micro-biochar: Evidence from cadmium removal and Eisenia foetida toxicity	ENVIRONMENTAL POLLUTION	2025-02-01	李伟,李宏*	一区
20	Anaerobic digestion and biochar/hydrochar enhancement of antibiotic-containing wastewater: Current situation, mechanism and future prospects	ENVIRONMENTAL RESEARCH	2025-01-01	李麟	一区
21	Synchronous control of nitrogen and phosphorus release from sediments in shallow lakes under wind disturbance by modified zeolite and Ca/Al-based sludge combination	ENVIRONMENTAL RESEARCH	2025-01-01	王圃	一区
22	Role of bio-chemical scale interactions in the Co-landfill of municipal solid waste and bottom ash	ENVIRONMENTAL RESEARCH	2025-02-01	王前	一区
23	Effects of unmodified and amine-functionalized polystyrene nanoplastics on nitrogen removal by Pseudomonas stutzeri: strain characteristics, extracellular polymers, and transcriptomics	ENVIRONMENTAL SCIENCE-NANO	2025-03-01	许小伟,郭劲松,方芳*	一区

24	Effects of the coexistence of polystyrene microplastics and imidacloprid on nitrogen and phosphorus transformation in soil	FRONTIERS OF ENVIRONMENTAL SCIENCE & ENGINEERING	2025-02-01	许小伟,蒋艳雪*,郭劲松,方芳	一区
25	Effects of "Grain for Green" program on soil hydraulic properties: A meta-analysis	GEODERMA	2025-01-01	张荣飞*	一区
26	Unraveling the resistance mechanism of anammox granular sludge to iron nanoparticles	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2025-01-01	高梦娇,晏鹏,陈猷鹏*	一区
27	Insights into closed-wet ultrasonic carbonation of MSWI fly ash: Carbon sequestration, heavy metals stabilization, and PCDD/Fs migration and degradation	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2025-01-01	陈志良	一区
28	Alteration of nitrogen sink and emission by vegetation distribution in a wetland with significant change in water level	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2025-01-01	李伟*	一区
29	Insight into the bimetallic structure sensibility of catalytic nitrate reduction over Pd-Cu nanocrystals	JOURNAL OF ENVIRONMENTAL SCIENCES	2025-03-01	时文歆	一区
30	Transcriptional and molecular simulation analysis of the response mechanism of anammox bacteria to 3,4-dimethylpyrazole phosphate stress	JOURNAL OF HAZARDOUS MATERIALS	2025-03-01	许小伟,晏鹏,陈猷鹏*	一区
31	In-line granular filtration for mitigating gypsum scaling in membrane distillation	JOURNAL OF MEMBRANE SCIENCE	2025-01-01	刘彩虹	一区
32	Global patterns of taxonomic and phylogenetic endemism in liverwort assemblages	PLANT DIVERSITY	2025-01-01	钱深华	一区
33	Strategy for clean phosphate recovery from polymerized aluminum chloride-treated sludge by alkaline anion exchange resins: High alkalinity and desorption	SEPARATION AND PURIFICATION TECHNOLOGY	2025-01-24	古励*,许林季*,何强	一区
34	Cobalt oxides grown in-situ on carbon nitride nanosheets for efficient peroxymonosulfate activation and organic contaminants degradation: Performance, mechanism, and application study	SEPARATION AND PURIFICATION TECHNOLOGY	2025-01-01	郑怀礼	一区
35	The promotional role of peroxydisulfate in Arsenic(III) oxidation by Fe(III)/Sulfite: Boosting and regulating the generation of radical and non-radical species	SEPARATION AND PURIFICATION TECHNOLOGY	2025-02-01	郑怀礼,丁魏*,李宏	一区
36	Efficient elimination of organic contaminants via a non-radical pathway involving activation of sulfite by synergistic adsorption-catalysis bifunctional chitosan-modified MOF derivative	SEPARATION AND PURIFICATION TECHNOLOGY	2025-02-24	梁嘉良	一区
37	New insights into the singlet oxygen-independent formation of	SEPARATION AND PURIFICATION	2025-03-01	赵志伟	一区

	TEMPO signals in electron paramagnetic resonance analysis	TECHNOLOGY			
38	Mechanical insights into a novel ultra-efficient amorphous-Co ₃ S ₄ activator of peroxymonosulfate for rapid degradation of acetochlor	SEPARATION AND PURIFICATION TECHNOLOGY	2025-02-19	时文歆*	一区
39	Exploring electron-transfer pathways in co-pyrolyzed waste-derived carbocatalyst for enhanced peroxydisulfate activation	SEPARATION AND PURIFICATION TECHNOLOGY	2025-01-01	刘国涛*,李蕾	一区
40	Tuning Three-Electron Oxygen Reduction Pathway for •OH Production from O ₂ : A Critical Review of Fundamental Principles, Catalyst/Electrode Development, and Application	ACS ES&T ENGINEERING	2025-03-01	叶志洪	一区
41	Assessment In Depth on the Anti-seasonal Water Fluctuations and Vegetation Dynamic Trends in a Plateau Lake, Southern China	ECOHYDROLOGY	2025-03-01	邵迎,陈忠礼*	二区
42	Synergistic remediation of electroplating wastewater contaminated soil and reduction of risk of groundwater contamination by biochar and Pseudomonas hibiscicola strain L1	INTERNATIONAL BIODETERIORATION & BIODEGRADATION	2025-01-01	安强*,赵彬*	二区
43	Nondestructive three-dimensional structure and growth characteristics of anammox granular sludge	INTERNATIONAL BIODETERIORATION & BIODEGRADATION	2025-02-01	陈猷鹏	二区
44	Dual cross-linked hydrogel microbial reactor: An improved microbial immobilization technology to treat mixed electroplating wastewater	PROCESS BIOCHEMISTRY	2025-03-01	安强*,赵彬	二区
45	Synchronicity Between the Rates of Reaeration and Pollutants Degradation During Self-Purification in a Large River	BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY	2025-02-01	钱深华,李伟*	三区
46	Zinc precipitation from ammonia leaching solutions of electric arc furnace dust by acetic acid	INTERNATIONAL JOURNAL OF CHEMICAL REACTOR ENGINEERING	2025-03-01	安强*	四区

二、授权专利

序号	专利名称	专利类型	参与专利人	授权日期
1	基于智能控制的固废多效过滤净化处理装置	发明	曾洁, 杨永川, 李莉, 高俊敏	2025-01-28
2	一种厌氧氨氧化细菌的细菌铁蛋白的分离纯化方法	发明	陈猷鹏, 晏鹏, 方芳, 郭劲松	2025-02-18
3	基于分段非线性函数的填埋场好氧稳定化修复耗时预测方法	发明	李蕾, 彭绪亚	2025-03-18
4	一种全等压均衡曝气装置及其安装使用方法	发明	马华	2025-03-25

三、数据分析

