

重庆大学环境与生态学院

科研简报

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二〇一九年九月

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一、学术获奖

序号	获奖名称	获奖人	获奖类别	获奖等级
1	功能化三维聚合物类水处理药剂的创新设计与工程应用	郑怀礼 (3) (重大为第二完成单位)	上海市技术发明奖	一等奖
2	高效絮凝剂合成方法及其污染控制的构效关系研究	郑怀礼 (2) (重大为第二完成单位)	湖南省自然科学奖	三等奖

二、科研论文

2019 年 1-9 月学院发表各类学术论文 90 篇，其中 SCI 期刊收录论文 79 篇：SCI1 区期刊论文 36 篇，SCI2 区期刊论文 34 篇，SCI3、4 区期刊论文 9 篇。

序号	论文题目	期刊名称	出版时间	参与作者	SCI 分区
1	Impacts of chlorothalonil on denitrification and N ₂ O emission in riparian sediments: Microbial metabolism mechanism	WATER RESEARCH	2019-01-01	何强,陈一	1
2	Enhanced nitrate removal by micro-electrolysis using Fe-0 and surfactant modified activated carbon	CHEMICAL ENGINEERING JOURNAL	2019-02-01	何强,古励,石德智	1
3	Sustainable modulation of anaerobic malodorous black water: The interactive effect of oxygen-loaded porous material and submerged macrophyte	WATER RESEARCH	2019-05-20	何强,李宏,梁嘉良	1
4	Sulfur and iron cycles promoted nitrogen and phosphorus removal in electrochemically assisted vertical flow constructed wetland treating wastewater treatment plant effluent with high S/N ratio	WATER RESEARCH	2019-03-15	何强,周健	1
5	Cost-effective domestic wastewater treatment and bioenergy recovery in an immobilized microalgal-based photoautotrophic microbial fuel cell (PMFC)	CHEMICAL ENGINEERING JOURNAL	2019-09-15	何强,周健,艾海男	1
6	Short-term responses of denitrification to chlorothalonil in riparian sediments: Process, mechanism and implication	CHEMICAL ENGINEERING JOURNAL	2019-02-15	陈一,何强	1

7	Disturbances of electron production, transport and utilization caused by chlorothalonil are responsible for the deterioration of soil denitrification	SOIL BIOLOGY & BIOCHEMISTRY	2019-07-01	陈一,何强	1
8	Biochar remediates denitrification process and N ₂ O emission in pesticide chlorothalonil-polluted soil: Role of electron transport chain	CHEMICAL ENGINEERING JOURNAL	2019-08-15	陈一,何强,胡学斌	1
9	Comprehensive metagenomic analysis reveals the effects of silver nanoparticles on nitrogen transformation in constructed wetlands	CHEMICAL ENGINEERING JOURNAL	2019-02-15	陈一,胡学斌,何强	1
10	Cobalt silicate hydroxide nanosheets in hierarchical hollow architecture with maximized cobalt active site for catalytic oxidation	CHEMICAL ENGINEERING JOURNAL	2019-03-01	时文歆,崔福义	1
11	Fouling mechanism of forward osmosis membrane in domestic wastewater concentration: Role of substrate structures	CHEMICAL ENGINEERING JOURNAL	2019-08-15	时文歆,崔福义	1
12	Dendritic amine sheltered membrane for simultaneous ammonia selection and fouling mitigation in forward osmosis	JOURNAL OF MEMBRANE SCIENCE	2019-08-15	时文歆,崔福义	1
13	Polyamidoamine dendrimer grafted forward osmosis membrane with superior ammonia selectivity and robust antifouling capacity for domestic wastewater concentration	WATER RESEARCH	2019-04-15	时文歆,崔福义	1
14	Establishment and efficiency analysis of a single-stage denitrifying phosphorus removal system treating secondary effluent	BIORESOURCE TECHNOLOGY	2019-09-01	周健	1
15	The alleviative effect of exogenous phytohormones on the growth, physiology and gene expression of <i>Tetraselmis cordiformis</i> under high ammonia-nitrogen stress	BIORESOURCE TECHNOLOGY	2019-06-01	周健,柴宏祥,何强	1
16	Single-stage denitrifying phosphorus removal biofilter utilizing intracellular carbon source for advanced nutrient removal and phosphorus recovery	BIORESOURCE TECHNOLOGY	2019-04-01	周健,何强	1
17	Introducing bifunctional metal-organic frameworks to the construction of a novel ratiometric fluorescence sensor for screening acid phosphatase activity	BIOSENSORS & BIOELECTRONICS	2019-07-01	柴宏祥	1
18	Enhanced simultaneous nitrification and denitrification in treating low carbon-to-nitrogen ratio wastewater: Treatment performance and nitrogen removal pathway	BIORESOURCE TECHNOLOGY	2019-05-01	柴宏祥,邵知宇,古励	1

19	Different mechanisms for E. coli disinfection and BPA degradation by CeO ₂ -AgI under visible light irradiation	CHEMICAL ENGINEERING JOURNAL	2019-04-05	梁嘉良	1
20	Visible-light-driven photocatalytic degradation of diclofenac by carbon quantum dots modified porous g-C ₃ N ₄ : Mechanisms, degradation pathway and DFT calculation	WATER RESEARCH	2019-03-01	梁嘉良,李芸邑	1
21	Fungi participate in driving home-field advantage of litter decomposition in a subtropical forest	PLANT AND SOIL	2019-01-01	林敦梅,钱深华,赵亮	1
22	Soil fauna promote litter decomposition but do not alter the relationship between leaf economics spectrum and litter decomposability	SOIL BIOLOGY & BIOCHEMISTRY	2019-09-01	林敦梅,钱深华,赵亮	1
23	Use of a floating adsorbent to remove dyes from water: A novel efficient surface separation method	JOURNAL OF HAZARDOUS MATERIALS	2019-08-05	郑怀礼	1
24	Modified magnetic chitosan microparticles as novel superior adsorbents with huge "force field" for capturing food dyes	JOURNAL OF HAZARDOUS MATERIALS	2019-04-05	郑怀礼,刘鸿霞	1
25	Anaerobic digestion: A review on process monitoring	RENEWABLE & SUSTAINABLE ENERGY REVIEWS	2019-04-01	李蕾,彭绪亚	1
26	Modified Anaerobic Digestion Model No. 1 for modeling methane production from food waste in batch and semi-continuous anaerobic digestions	BIORESOURCE TECHNOLOGY	2019-01-01	彭绪亚,李蕾	1
27	Highly synergistic effects on ammonium removal by the co-system of Pseudomonas stutzeri XL-2 and modified walnut shell biochar	BIORESOURCE TECHNOLOGY	2019-05-01	安强,赵彬	1
28	Simultaneous nutrient and carbon removal and electricity generation in self-buffered biocathode microbial fuel cell for high-salinity mustard tuber wastewater treatment	BIORESOURCE TECHNOLOGY	2019-01-01	付国楷,张智	1
29	Deposition Kinetics of Colloidal Manganese Dioxide onto Representative Surfaces in Aquatic Environments: The Role of Humic Acid and Biomacromolecules	ENVIRONMENTAL SCIENCE & TECHNOLOGY	2019-01-01	皇甫小留,何强,刘彩虹	1
30	Interactions between suspended particulate matter and algal cells contributed to the reconstruction of phytoplankton communities in turbulent waters	WATER RESEARCH	2019-02-01	李宏,何强,艾海男	1

31	Understanding the linkages between production activities and ecosystem degradation in China: An ecological input-output model of 2012	JOURNAL OF CLEANER PRODUCTION	2019-05-01	庞明月	1
32	Surface-Adaptive and Initiator-Loaded Graphene as a Light-Induced Generator with Free Radicals for Drug-Resistant Bacteria Eradication	ACS APPLIED MATERIALS & INTERFACES	2019-01-16	石德智	1
33	Highly efficient nitrate removal in a heterotrophic denitrification system amended with redox-active biochar: A molecular and electrochemical mechanism	BIORESOURCE TECHNOLOGY	2019-03-01	阳春,陈一,吴正松	1
34	Insight into mechanism of arsanilic acid degradation in permanganate-sulfite system: Role of reactive species	CHEMICAL ENGINEERING JOURNAL	2019-03-01	张静	1
35	Fabrication of a novel polyvinylidene fluoride membrane via binding SiO ₂ nanoparticles and a copper ferrocyanide layer onto a membrane surface for selective removal of cesium	JOURNAL OF HAZARDOUS MATERIALS	2019-01-22	张利兰	1
36	Enhancement of ciprofloxacin degradation in the Fe(II)/peroxymonosulfate system by protocatechuic acid over a wide initial pH range	CHEMICAL ENGINEERING JOURNAL	2019-04-28	张智	1
37	Analysis of 17 alpha-ethinylestradiol and bisphenol A adsorption on anthracite surfaces by site energy distribution	CHEMOSPHERE	2019-02-01	郭劲松,方芳	2
38	Adsorption characteristics of nitrite on natural filter medium: Kinetic, equilibrium, and site energy distribution studies	ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY	2019-03-01	郭劲松,方芳	2
39	Underlying mechanisms of ANAMMOX bacteria adaptation to salinity stress	JOURNAL OF INDUSTRIAL MICROBIOLOGY & BIOTECHNOLOGY	2019-05-01	郭劲松,方芳,陈猷鹏	2
40	Turn the potential greenhouse gases into biomass in harmful algal blooms waters: A microcosm study	SCIENCE OF THE TOTAL ENVIRONMENT	2019-03-01	李宏,艾海男,何强	2
41	The role of turbulence in internal phosphorus release: Turbulence intensity matters	ENVIRONMENTAL POLLUTION	2019-09-01	李宏,何强	2
42	Strong turbulence benefits toxic and colonial cyanobacteria in water: A potential way of climate change impact on the expansion of Harmful Algal Blooms	SCIENCE OF THE TOTAL ENVIRONMENT	2019-06-20	李宏,何强,胡学斌	2

43	A conceptual method to simultaneously inhibit methane and hydrogen sulfide production in sewers: The carbon metabolic pathway and microbial community shift	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2019-08-15	艾海男,何强,李宏	2
44	Distinct responses of planktonic and sedimentary bacterial communities to anthropogenic activities: Case study of a tributary of the Three Gorges Reservoir, China	SCIENCE OF THE TOTAL ENVIRONMENT	2019-08-09	艾海男,李宏,何强	2
45	Approach deliberation for source identification of sedimentary organic matters via comparing freshwater lakes with multi-ecotypes	SCIENCE OF THE TOTAL ENVIRONMENT	2019-01-01	李伟	2
46	Combined effects of elevated carbon dioxide and temperature on phytoplankton-zooplankton link: A multi-influence of climate change on freshwater planktonic communities	SCIENCE OF THE TOTAL ENVIRONMENT	2019-03-25	李伟,姚婧梅,马华	2
47	Adsorption of anion polyacrylamide from aqueous solution by polytetrafluoroethylene (PTFE) membrane as an adsorbent: Kinetic and isotherm studies	JOURNAL OF COLLOID AND INTERFACE SCIENCE	2019-05-15	时文歆	2
48	Support membrane pore blockage (SMPB): An important phenomenon during the fabrication of thin film composite membrane via interfacial polymerization	SEPARATION AND PURIFICATION TECHNOLOGY	2019-01-19	时文歆	2
49	Pivotal roles of artificial oxygen vacancies in enhancing photocatalytic activity and selectivity on Bi ₂ O ₂ CO ₃ nanosheets	CHINESE JOURNAL OF CATALYSIS	2019-05-01	王里奥	2
50	Experimental studies on carbon dioxide absorption using potassium carbonate solutions with amino acid salts	SEPARATION AND PURIFICATION TECHNOLOGY	2019-05-15	王里奥	2
51	Biodegradation potential of polycyclic aromatic hydrocarbons by immobilized Klebsiella sp. in soil washing effluent	CHEMOSPHERE	2019-05-01	许晓毅,吉芳英	2
52	Effect of Tenax addition amount and desorption time on desorption behaviour for bioavailability prediction of polycyclic aromatic hydrocarbons	SCIENCE OF THE TOTAL ENVIRONMENT	2019-02-15	许晓毅,吉芳英	2
53	Enhanced coagulation by high-frequency ultrasound in Microcystis aeruginosa-laden water: Strategies and mechanisms	ULTRASONICS SONOCHEMISTRY	2019-01-23	张智	2

54	Removal of <i>Microcystis aeruginosa</i> by ultrasound: Inactivation mechanism and release of algal organic matter	ULTRASONICS SONOCHEMISTRY	2019-09-01	张智	2
55	Unraveling sorption of nickel from aqueous solution by KMnO ₄ and KOH-modified peanut shell biochar: Implicit mechanism	CHEMOSPHERE	2019-01-01	安强	2
56	Integrating environmental parameters and economic benefits to analyze the ecological agriculture (EA) application in the mountain rice paddy system of Chongqing, China	ENVIRONMENTAL SCIENCES EUROPE	2019-04-04	陈忠礼,邵迎	2
57	Quantification of personal thermal comfort with localized airflow system based on sensitivity analysis and classification tree model	ENERGY AND BUILDINGS	2019-04-10	杜晨秋,喻伟,李百战	2
58	Organotins in the aquatic media of secondary anabranches in the Three Gorges Reservoir Region, China	CHEMOSPHERE	2019-02-01	高俊敏,郭劲松	2
59	Effects of green waste participation on the co-digestion of residual sludge and kitchen waste: A preliminary study	SCIENCE OF THE TOTAL ENVIRONMENT	2019-06-25	古励,柴宏祥,艾海男	2
60	A review on the interactions between engineered nanoparticles with extracellular and intracellular polymeric substances from wastewater treatment aggregates	CHEMOSPHERE	2019-03-01	何强,皇甫小留,刘彩虹	2
61	Reduction and immobilization of hexavalent chromium in chromite ore processing residue using amorphous FeS ₂	SCIENCE OF THE TOTAL ENVIRONMENT	2019-03-25	李芸邑,梁嘉良	2
62	In-situ remediation of hexavalent chromium contaminated groundwater and saturated soil using stabilized iron sulfide nanoparticles	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2019-02-01	刘元元	2
63	Growth kinetics of <i>Candidatus</i> <i>Methanoperedens nitroreducens</i> ; enriched in a laboratory reactor	SCIENCE OF THE TOTAL ENVIRONMENT	2019-03-13	卢培利	2
64	Assessing the environmental externalities for biomass- and coal-fired electricity generation in China: A supply chain perspective	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2019-09-15	庞明月	2
65	Sources and dry deposition of carbonaceous aerosols over the coastal East China Sea: Implications for anthropogenic pollutant pathways and deposition	ENVIRONMENTAL POLLUTION	2019-02-01	王锋文	2

66	N-propyl functionalized spherical mesoporous silica as a rapid and efficient adsorbent for steroid estrogen removal: Adsorption behaviour and effects of water chemistry	CHEMOSPHERE	2019-01-01	阳春,梁志杰,赵志伟	2
67	Inhibition of the photosynthetic activity of <i>Synedra</i> sp. by sonication: Performance and mechanism	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2019-03-01	姚娟娟,张智	2
68	Activation of sodium percarbonate by vanadium for the degradation of aniline in water: Mechanism and identification of reactive species	CHEMOSPHERE	2019-01-01	张赛,李莉,胡学斌	2
69	Degradation of emerging contaminants by Co (III) ions in situ generated on anode surface in aqueous solution	CHEMOSPHERE	2019-04-01	赵纯,王昭阳,郑怀礼	2
70	Evaluation a self-assembled anionic polyacrylamide flocculant for the treatment of hematite wastewater: Role of microblock structure	JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS	2019-02-01	郑怀礼	2
71	Dual Polydopamine-Anion Polyacrylamide Polymer System for Improved Removal of Nickel Ions and Methylene Blue from Aqueous Solution	SCIENCE OF ADVANCED MATERIALS	2019-01-01	郑怀礼,胡学斌,刘鸿霞	3
72	Hydrophobic modification of cationic microblocked polyacrylamide and its enhanced flocculation performance for oily wastewater treatment	JOURNAL OF MATERIALS SCIENCE	2019-07-01	郑怀礼,赵纯	3
73	Pollutant removal performance of an integrated system that combines a baffled vertical-flow wetland and a scenic water body	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	2019-01-01	柴宏祥,邵知宇,何强	3
74	Enhancement of performance and stability of anaerobic co-digestion of waste activated sludge and kitchen waste by using bentonite	PLOS ONE	2019-07-10	古励,石德智,柴宏祥	3
75	Purification of leachate from sludge treatment beds by subsurface flow constructed wetlands: effects of plants and hydraulic retention time	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	2019-02-01	陈一	3
76	Oxidative Stress Effects of Soluble Sulfide on Human Hepatocyte Cell Line LO2	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	2019-05-13	陈忠礼,邵迎	3
77	Performance of an intermediate soil cover for landfill sites	EARTH AND ENVIRONMENTAL SCIENCE TRANSACTIONS OF THE ROYAL SOCIETY OF EDINBURGH	2019-06-01	王里奥	4

78	ADSORPTION AND SEPARATION OF CO ₂ AND CH ₄ ON ACTIVATED CARBON MODIFIED BY ACETIC ACID	FRESENIUS ENVIRONMENTAL BULLETIN	2019-08-01	王里奥	4
79	Magnetic flocculation of anion dyes by a novel composite coagulant	DESALINATION AND WATER TREATMENT	2019-03-01	郑怀礼,向文英	4

三、发明专利

序号	专利名称	专利类型	参与专利人	授权日期	专利证书号
1	一株施氏假单胞菌及其应用	发明	赵彬,安强	2019-04-01	3405038
2	AAO 型流化床一体化污水处理设备	发明	何强,李果	2019-03-01	3271240