

# 中文目次

<b>序言</b>		
2023年地质微生物学专题序言 李文均, 蒋宏忱	2276 土壤细菌网络互作调控线虫肠道细菌群落 张慧, 肖娴, 黄瑞林, 马志远, 刘满强, 赵远, 蒋瑀霖, 孙波, 梁玉婷	
<b>地质微生物学</b>		
2031 微生物厌氧氨氧化耦合铁还原的研究进展及展望 罗珺月, 冯杰, 罗阳, 蒋宏忱, 黄柳琴	2291 青藏高原湖泊沉积物中有机碳组分构成及其对微生物群落结构的影响 姚秉富, 杨渐, 吕秋莹, 王北辰, 蒋宏忱	
2047 微生物互营产甲烷过程中的种间电子传递 张瀚云, 周瑾洁, 张翠景, 李猛	2312 青海湖岸带土壤与沉积物的地化特征与细菌群落对水位上升的响应 李馨怡, 王北辰, 熊雄, 敖鸿毅, 吴辰熙, 杨渐, 蒋宏忱	
2066 南极乔治王岛冰锥洞微生物培养探索 毛梦婷, 张瑾, 文姣, 陈波, 廖丽	<b>综述</b>	
2078 微小杆菌属( <i>Exiguobacterium</i> )细菌的能量代谢途径分析 赵芮, 李登辉, 李学恭, 张维佳, 赵苑, 吴龙飞	2330 CBM在多糖底物降解中的应用进展 倪新, 杨帆	
2094柴达木盆地尕斯库勒盐湖区邻近水体对湖泊微生物群落的贡献 赵卓丽, 黄建蓉, 韩积斌, 蒋宏忱	2340 产肠毒素大肠杆菌诱导肠上皮细胞凋亡的研究进展 李保良, 庞胜美, 吕林芬, 朱国强, 段强德	
2109 小柴旦盐湖脱硫棒状菌属的环境适应性机制分析 曾健雄, 常利草, 胡文哲, 刘俊, 蒋宏忱, 方云	2350 细菌蛋白酶体及蛋白酶体抑制剂研究进展 孔啸鸣, 刘明皓, 黄英	
2120 湖北和尚洞固氮微生物群落的生境特异性及网络分析 李璐, 程晓钰, 刘晓燕, 王咲衡, 李晴, 张玮祎, 王红梅	2369 内生真菌与宿主植物协同调控砷胁迫作用机制研究进展 毕悦, 代红洋, 张兴开, 曹冠华, 贺森	
2136 高砷含水层参与腐殖酸-铁矿物转化的关键微生物群落及其对砷迁移转化的影响 田雪歌, 宋腾龙, 罗然, 吴泽宇, 王艳红	<b>研究报告</b>	
2153 石灰土演替过程中颗粒态有机质和矿物结合态有机质的微生物群落特征 胥娇, 李强	2385 不同制曲工艺对速成永川豆豉后发酵过程和产品品质的影响 周旭, 曾涛, 王洪伟, 梁明, 张玉, 王晨, 索化夷	
2173 内源微生物驱油及其对油藏微生物活动的影响 崔庆锋, 俞理, 张群, 代学成, 王红波	2401 耐砷促生菌对超富集植物蜈蚣草砷吸收及根际微生物群落的调控作用 李旖曦, 陈涵冰, 王耀强, 张虹, 张勇, 韩永和	
2185 黄铁矿对煤生物产气和微生物群落结构的影响 李啸宇, 何环, 张倩, 赵晗, 任恒星, 陈林勇, 朱术云, 徐智敏, 黄再兴	2415 红色红曲菌M7的丝衣霉酸基因簇及其功能研究 洪莘, Virk Muhammad Safiullah, 陈福生	
2204 生物淋洗修复钒污染土壤的性能与机理研究 李敏, 陈思铭, 王长远, 史新悦, 张宝刚	2430 乙胺丁醇与异烟肼协同对耻垢分枝杆菌生长的影响研究(英文) 朱晨, 杨敏	
2220 天然Fe(Ⅱ)矿物-生物质强化微生物还原固定五价钒研究 孙雅洁, 王梦男, 路建平, 耿榕悦, 张宝刚	2440 CD630_27900基因缺失显著降低艰难拟梭菌自溶速率、毒力及对酸和抗生素的耐受性 杨君仪, 鲍江舰, 邵瑞瑞, 张婷, 廖健, 程玉梅, 官志忠, 齐晓岚, 陈峥宏, 崔古贞, 洪伟	
2233 人工湿地反应性填料开发及其脱氮除磷性能研究 陈一帆, 王梦男, 路建平, 毛袆曼, 张宝刚	2456 石油污染土壤自然衰减过程多环芳烃降解基因动态特征 吕杰, 马媛, 李二阳, 张帅, 刘寒宇, 吕光辉	
2245 二氧化碳生物转化制甲烷技术研究进展 姜冠伦, 张新妙, 栾金义	2472 基于超高效液相色谱-串联质谱技术的柑橘黑点病菌( <i>Diaporthe citri</i> )发育关联代谢物分析 蒲占渭, 朱莉, 杜丹超, 胡秀荣, 鹿连明, 黄振东	
2261 我国三大水系环境微塑料污染现状及其表面微生物群落特征的研究进展 彭子淇, 李佳岭, 邱丽婷, 舒冉君, 余婷婷	<b>技术与方法</b>	
	2488 基于细胞热漂移测定(CETSA)技术鉴定活细胞内药物靶标的标准操作流程 王莉, 刘景芳, 李维林, 李二伟, 孙树涛, 李娟, 罗元明	

# CONTENTS

PREFACE	
1	The special issue of Geomicrobiology in 2023 LI Wenjun, JIANG Hongchen
GEOMICROBIOLOGY	
2031	Research progress and prospect of microbial ammonium oxidation coupled to Fe(III) reduction LUO Junyue, FENG Jie, LUO Yang, JIANG Hongchen, HUANG Liuqin
2047	Interspecies electron transfer during microbial syntrophic methanogenesis ZHANG Hanyun, ZHOU Jinjie, ZHANG Cuijing, LI Meng
2066	Cultivation of microbes in habitat of cryoconite at King George Island of Antarctica MAO Mengting, ZHANG Jin, WEN Jiao, CHEN Bo, LIAO Li
2078	Energy metabolism pathways in <i>Exiguobacterium</i> ZHAO Rui, LI Denghui, LI Xuegong, ZHANG Weijia, ZHAO Yuan, WU Long-Fei
2094	Contributions of adjacent water bodies to the microbial communities in the Gas Hure Salt Lake of the Qaidam Basin ZHAO Zhuoli, HUANG Jianrong, HAN Jibin, JIANG Hongchen
2109	The environmental adaptation mechanism of <i>Desulfotignum</i> in Xiaochaidan Lake ZENG Jianxiong, CHANG Licao, HU Wenzhe, LIU Jun, JIANG Hongchen, FANG Yun
2120	Habitat specificity and network analysis of nitrogen-fixing bacteria in the Heshang Cave, Hubei Province LI Lu, CHENG Xiaoyu, LIU Xiaoyan, WANG Yiheng, LI Qing, ZHANG Weiwei, WANG Hongmei
2136	Key microbial communities involved in humic acid-Fe mineral transformation in high arsenic aquifers and their effects on arsenic release TIAN Xuege, SONG Tenglong, LUO Ran, WU Zeyu, WANG Yanhong
2153	Characteristics of soil microbial communities in particulate organic matter and mineral-associated organic matter along calcareous succession process XU Jiao, LI Qiang
2173	Indigenous microbial flooding and its influence on microbial activities in reservoirs CUI Qingfeng, YU Li, ZHANG Qun, DAI Xuecheng, WANG Hongbo
2185	Influence of pyrite on biogenic coal bed methane production and microbial community structure LI Xiaoyu, HE Huan, ZHANG Qian, ZHAO Han, REN Hengxing, CHEN Linyong, ZHU Shuyun, XU Zhimin, HUANG Zaixing
2204	Performance and mechanism of bioleaching remediation of vanadium contaminated soil LI Min, CHEN Siming, WANG Changyuan, SHI Xinyue, ZHANG Baogang
2220	Microbial reduction and fixation of pentavalent vanadium enhanced by natural Fe(II) mineral-biomass SUN Yajie, WANG Mengnan, LU Jianping, GENG Rongyue, ZHANG Baogang
2233	Development of reactive fillers in constructed wetland and its performance of nitrogen and phosphorus removal CHEN Yifan, WANG Mengnan, LU Jianping, MAO Yimin, ZHANG Baogang
2245	Research progress in bio-conversion of carbon dioxide to methane JIANG Guanlun, ZHANG Xinmiao, LUAN Jinyi
2261	Research progress in microplastic pollution status and microorganisms on microplastics in three major rivers in China PENG ZiQi, LI Jialing, QIU Liting, SHU Ranjun, SHE Tingting
2276	Nematode gut bacterial communities are regulated by soil bacterial network interactions ZHANG Hui, XIAO Xian, HUANG Ruilin, MA Zhiyuan, LIU Manqiang, ZHAO Yuan, JIANG Yuji, SUN Bo, LIANG Yuting
2291	Organic carbon composition in lake sediments on the Qinghai-Tibet Plateau and the influence on microbial community structure YAO Bingfu, YANG Jian, LU Qiuying, WANG Beichen, JIANG Hongchen
2312	Response of geochemistry and bacterial communities to water-level rise in the soil and sediment of the coastal zone in Qinghai Lake LI Xinyi, WANG Beichen, XIONG Xiong, AO Hongyi, WU Chenxi, YANG Jian, JIANG Hongchen
REVIEWS	
2330	Application of carbohydrate-binding modules in degradation of polysaccharides NI Xin, YANG Fan
2340	Research progress in enterotoxigenic <i>Escherichia coli</i> -induced apoptosis of intestinal epithelial cells LI Baoliang, PANG Shengmei, LÜ Linfen, ZHU Guoqiang, DUAN Qiande
2350	Bacterial proteasomes and proteasome inhibitors KONG Xiaoming, LIU Minghao, HUANG Ying
2369	Synergistic mechanism of endophytic fungi and host plants against arsenic stress BI Yue, DAI Hongyang, ZHANG Xingkai, CAO Guanhua, HE Sen
RESEARCH ARTICLES	
2385	Effect of different koji-making processes on the post-fermentation process and product quality of rapid Yongchuan Douchi ZHOU Xu, ZENG Tao, WANG Hongwei, LIANG Ming, ZHANG Yu, WANG Chen, SUO Huayi
2401	Effects of arsenic-tolerant growth-promoting bacteria on arsenic uptake and rhizosphere microbial community of hyperaccumulator <i>Pteris vittata</i> LI Yixi, CHEN Hanbing, WANG Yaoqiang, ZHANG Hong, ZHANG Yong, HAN Yonghe
2415	Study on the byssochlamic acid gene cluster of <i>Monascus ruber</i> M7 and its function HONG Shen, VIRK Muhammad Saifullah, CHEN Fusheng
2430	Ethambutol and isoniazid influence the growth of <i>Mycobacterium smegmatis</i> ZHU Chen, YANG Min
2440	CD630_27900 gene deletion significantly reduces autolysis rate and virulence of <i>Clostridioides difficile</i> and the tolerance to acids and antibiotics YANG Junyi, BAO Jiangjian, SHAO Ruirui, ZHANG Ting, LIAO Jian, CHENG Yumei, GUAN Zhizhong, QI Xiaolan, CHEN Zhenghong, CUI Guzhen, HONG Wei
2456	Dynamic characteristics of genes involved in degradation of polycyclic aromatic hydrocarbons during natural attenuation of crude oil-contaminated soils in Xinjiang, China LU Jie, MA Yuan, LI Eryang, ZHANG Shuai, LIU Hanyu, LU Guanghui
2472	Development-associated metabolites of <i>Diaporthe citri</i> : a metabolomics analysis based on UPLC-MS/MS PU Zhanxu, ZHU Li, DU Danchao, HU Xiurong, LU Lianming, HUANG Zhendong
TECHNOLOGY AND METHODOLOGY	
2488	A standard operating procedure for identification of drug targets in living cells based on cell thermal shift assay (CETSA) WANG Li, LIU Jingfang, LI Weilin, LI Erwei, SUN Shutao, LI Juan, LUO Yuanming