

微生物学报

2019 年 第 59 卷(第 1–12 期) 总目录

地质微生物学专刊

- 2019 年地质微生物学专刊序言 李文均, 蒋宏忱.6 (i)
- 新型产甲烷古菌研究进展 段昌海, 张翠景, 孙艺华, 李猛.6 (981)
- 分子生物学技术在热泉地质微生物研究中的应用 何晴, 王尚, 邓晔.6 (996)
- 岩溶区水生生态系统微藻的生物碳泵效应 严壮, 汪夏雨, 李为, 余龙江.6 (1012)
- 不同降压过程对深海海水中可培养细菌群落组成的影响
..... 李学恭, 张维佳, 周丽红, 蔡凤海, 吴龙飞.6 (1026)
- 冲绳海槽热液区可培养硫氧化细菌多样性及其硫氧化特性
..... 杜瑞, 于敏, 程景广, 张静静, 田晓荣, 张晓华.6 (1036)
- 北极苔原土壤中可培养细菌的分离及其抗菌活性测定 贺瑞含, 杜宗军, 俞勇, 李会荣.6 (1050)
- 基于可培养方法分析云南腾冲小空山火山谷芽胞杆菌分布特征
..... 刘国红, 刘波, 王阶平, 朱育菁, 陈峥, 车建美, 陈倩倩.6 (1063)
- 安徽某铁矿不同矿山废水库中微生物群落结构特征
..... 曹子敏, Joseph Frazer Banda, 裴理鑫, 卫朋飞, 辛瑞瑞, 董慧渊, 郝春博.6 (1076)
- 西藏热泉沉积物的硫氧化细菌多样性及其影响因素 甄莉, 吴耿, 杨渐, 蒋宏忱.6 (1089)
- 内蒙古岗更诺尔湖泊退化情景下好氧甲烷氧化的微生物过程研究
..... 莫永亮, 郑燕, 金凤, 宝音陶格涛, 贾仲君.6 (1105)
- 典型草地土壤好氧甲烷氧化的微生物生态过程
..... 王玉芳, 蔡元锋, 侯扶江, 贾仲君, Saman Bowatte.6 (1116)
- 三峡库区水体中固氮微生物多样性及其影响因素 余伟钰, 冯灿, 杨渐, 蒋宏忱.6 (1127)
- 基于数据库分析不同类型生境中厌氧氨氧化细菌的多样性分布特征
..... 洪义国, 黄天政, 李益本, 吴佳鹏, 焦黎静, 崔明超.6 (1143)
- 镉离子污染条件下微生物群落中细菌与藻类的相互作用
..... 石遵计, 曹政, 胡科鑫, 彭鑫碧, 朱一帆, 谢波.6 (1156)
- 过表达 *Na, K-ATPase* 基因增强了黑曲霉对硅灰石的风化能力 孙晶晶, 余诚峰, 付紫玉, 连宾.6 (1164)
- 芦岭煤田微生物群落结构和生物成因气的产甲烷类型研究 刘亚飞, 王波波, 张洪勋, 余志晟.6 (1174)
- 微藻-细菌共生体系在废水处理中的应用 皮永蕊, 吕永红, 柳莹, 唐永政, 高丽, 包木太.6 (1188)
- 油藏嗜热菌与膨润土的相互作用及其对储层防膨的意义 胡小丽, 张蔚, 刘邓, 邱轩, 王红梅.6 (1197)

肠道微生物专刊

- 微生物组学研究的“淘金时代” 胡永飞.9 (1631)
- 口服硫酸链霉素对帕金森小鼠症状的改善及其对肠道菌群的影响
..... 安云英, 吴敏娜, 李璞泽, 靖昕瑞, 张剑锋, 薛红飞, 邓保国, 钟根深.9 (1636)
- 高通量测序分析实验性脑脊髓炎肠道微生物变化及与 IL-17、IFN- γ 相关性
..... 李晓玲, 张博, 孙梦娇, 鲍彩彩, 王满侠.9 (1651)
- 糖尿病及糖尿病心血管并发症患者肠道菌群的特征 陈茜, 薛勇, 宋晓峰, 朱宝利.9 (1660)
- 健康藏族与汉族大学生肠道细菌多样性研究 刘怡萱, 曹鹏熙, 马红梅, 刘星.9 (1674)
- 基于 16S rRNA 基因高通量测序研究豺猫肠道微生物多样性(英文)
..... 陈磊, 刘咪, 沙未来, 高迎, 陈佳欣, 朱静.9 (1694)
- 低蛋白质日粮对断奶仔猪生长相关激素和肠道微生物区系的影响
..... 虞德夫, 朱晓峰, 冯江银, 康翠翠, 张明钰, 朱伟云, 杭苏琴.9 (1695)
- 基于高通量测序的不同虫态洋虫内共生微生物群落分析
..... 王长文, 房柳, 梁运江, 黄世臣, 董微巍.9 (1705)
- 强化玉米饮食对小鼠肠道菌群结构和功能的影响
..... 郑帅, 朴春梅, 张芝, 刘婷婷, 王吉静, 王绿娅, 杜杰.9 (1714)
- 猎豹(*Acinonyx jubatus*) 肠道微生物多样性及其性别差异研究(英文)
..... 陈磊, 刘咪, 朱静, 高迎, 陈佳欣, 沙未来.9 (1736)
- 微生物-肠-脑轴的研究进展 高侃, 慕春龙, 朱伟云.9 (1737)
- 中华蜜蜂幼虫肠道响应球囊菌胁迫的 microRNA 应答分析
杜宇, 童新宇, 周丁丁, 陈大福, 熊翠玲, 郑燕珍, 徐国钧, 王海朋, 陈华枝, 郭意龙, 隆琦, 郭睿.9 (1747)
- 一株猪肠道 *Lactobacillus animalis* LGM 对结肠炎小鼠 Th 细胞分化转录因子基因表达的影响
..... 程颖州, 慕春龙, 朱伟云.9 (1765)
- 人体肠道分节丝状菌 SFB 研究进展 陈华海, 吴柳, 唐成, 王欣, 尹业师.9 (1778)
- 罗伊氏乳杆菌肠道分离株的遗传多样性研究 余中节, 赵洁, 宋宇琴, 孙志宏.9 (1786)
- 蠅螋肠道中碱性内切葡聚糖酶基因的克隆表达及功能分析
..... 陈俊梅, 李文鹏, 赵素雅, 黄冰纷, 王博文, 惠丰立, 尹晓燕, 牛秋红.9 (1798)
- 肠道微生物功能宏基因组学与代谢组学关联分析方法研究进展
..... 侯璐文, 吴长新, 秦雪梅, 李建国.9 (1813)
- 基于 PacBio SMRT 测序技术评估妊娠期糖尿病人的肠道菌群
..... 舒明月, 付爱思, 张洁, 陈佳, 郭静, 丁琼, 徐焱成, 刘天罡.9 (1823)

学科先贤

- 噬菌体诊断技术的创新者——何晓青 张彤阳, 青宁生.4 (771)
- 为我国酿酒事业奉献一生的杰出专家——熊子书 青宁生.8 (1624)

综 述

- 纤维单胞菌属放线菌的研究进展……………石云雷, 余利岩, 张玉琴.1 (1)
- 获取有机物厌氧降解产甲烷过程中关键功能类群——互营细菌培养物……………张雪, 张辉, 承磊.2 (211)
- 自噬在病原真菌生殖中的作用(英文)……………范成莉, 常安妮, 刘同宝.2 (234)
- 细菌样颗粒——新型乳酸菌表面展示技术及其应用……………王建忠, 赵建伟, 王春风.3 (411)
- 蛋白酶体抑制剂 Syrbactins 家族的生物合成……………刘晓彤, 许晓坤, 张友明, 李爱英.3 (420)
- 链球菌神经氨酸酶的作用机制及酶活性的测定技术……………范玉凤, 刘广锦.3 (433)
- 环境雌激素的微生物降解……………田克俭, 孟繁星, 霍洪亮.3 (442)
- 细菌群体感应调控多样性及群体感应淬灭……………孙锋, 严慧聪, 汪美贞.3 (454)
- 萜类合成酶定向进化的新思路……………胡智慧, 翁彦如, 谌柄旭, 于爱群, 肖冬光.4 (591)
- 黄病毒 NS2B-NS3pro 蛋白酶的结构研究进展……………武晨, 杨海涛, 王泽方.4 (601)
- 禽沙门菌诱导宿主免疫应答的特性……………尹超, 徐黎娟, 李求春, 潘志明, 耿士忠, 焦新安.4 (612)
- 副溶血性弧菌分泌系统在致病力中作用的研究进展……………穆丽丽, 牛犇, 赵勇.4 (621)
- 微生物介导反刍动物瘤胃氨生成及其对瘤胃功能的影响……………徐诣轩, 李志鹏, 申军士, 朱伟云.5 (781)
- 古菌中蛋白甲基化修饰的研究进展……………韩小云, 翟斌元, 申玉龙.5 (789)
- 拟孢囊菌属放线菌的研究进展……………熊有威, 蒋继宏, 秦盛.5 (799)
- 病毒功能性受体的筛选新策略及其应用……………孙慧敏, 李素, 王文静, 仇华吉.5 (809)
- 肠道菌分泌的抑菌肽——小菌素……………梁轩, 张瑜, 汪业军, 朱国强.5 (821)
- 革兰氏阴性菌膜间质蛋白酶 DegP 研究进展……………王昌宇, 汪铭书, 程安春.7 (1211)
- 鸭疫里默氏杆菌毒力及耐药机制研究进展……………刘马峰, 田琇, 程安春.7 (1222)
- 酵母 Sirtuins 在细胞寿命中的作用……………李明光, 姜勇, 蔡建辉.7 (1332)
- 深海极端微生物菌群及代谢产物多样性的研究进展……………汤伟, 张军, 李广善, 王悦, 何增国.7 (1241)
- 假单胞菌铁载体不产生突变体形成的进化机理……………张琇, 陈海魁, 张学贤.8 (1411)
- 细菌抗菌肽耐药机制研究进展……………王雨霏, 陈相书, 张凌琳.8 (1419)
- PstS 和 PstB 调控无机磷酸盐转运和介导细菌耐药的机制……………张鹏, 王龙, 谢明杰.8 (1429)
- 慢性乙型肝炎潜在治疗靶点和新药研发进展……………郑金伟, 袁权, 夏宁邵.8 (1437)
- 雌马酚产生细菌及其雌马酚合成代谢机制……………胡云霏, 陈华海, 尹业师.8 (1452)
- 嗜热古菌异化型硫氧化途径的研究进展……………刘丽君, 汪洋, 刘双江, 姜成英.8 (1463)
- 食用菌病毒的研究进展……………李雪飞, 宋冰, 李玉.10 (1841)
- 霍乱弧菌检测技术研究进展……………方微微, 王恒樑, 李晓晖, 卢瑛.10 (1855)
- 培菌昆虫相关放线菌的次级代谢产物研究进展……………未建华, 李净净, 倪金凤.10 (1864)
- 红藻凝集素 G 研究进展……………李兰, 郑其升, 侯继波.10 (1872)
- 水果害虫斑翅果蝇体内微生物菌群研究进展……………邴孝利, 陆益佳.10 (1880)

- 极端嗜热古菌 DNA 修复核酸内切酶的研究进展 李玉婷, 史昊强, 张立奎.10 (1889)
- 灵杆菌合成灵菌红素的转录调控 孙地, 刘聪, 刘伟杰.11 (2051)
- 青枯劳尔氏菌多基因家族 III 型效应蛋白在植物病害发展及防御系统中的作用(英文)
..... 陈立, 魏谦卓, 大西浩平.11 (2068)
- 荧光假单胞菌防治果蔬病害的研究进展 梅小飞, 王智荣, 阚建全.11 (2069)
- GSDMD 介导的细胞焦亡在感染性疾病中的研究进展 刘瑞卿, 李胜玉, 申艳娜.11 (2083)
- 聚对苯二甲酸乙二醇酯降解酶的研究进展 李秀, 杨海涛, 王泽方.12 (2251)
- 乙型肝炎病毒体外感染和复制的细胞模型 王明凤, 曹佳莉, 袁权, 夏宁邵.12 (2263)
- 酵母内源性海藻糖代谢调控研究进展 陈敦武, 陈雄, 李欣.12 (2276)

研究报告

- 一株耐 Cd 菌株的分离、鉴定及基本特性 李倩, 张平, 廖柏寒, 彭佩钦, 梅金星, 徐继敏.1 (11)
- 非核糖体多肽 Surugamides 生物合成基因簇镶嵌式结构的解析
..... 许春敏, 林霄, 李蕾, 王淑萍, 杨帆, 徐石海, 邓海, 周永军, 林厚文.1 (25)
- 毕赤酵母表达的嗜热蓝状菌 β -葡萄糖苷酶 N-糖基化修饰的作用与功能
..... 李新新, 柏映国, 华晨, 马锐, 石鹏君, 罗会颖, 姚斌.1 (37)
- 真菌 *Talaromyces stipitatus* WH4-2 中的抗菌活性成分 姜薇, 张哲, 单体状, 赵梦冉, 缪莉.1 (48)
- 一株地膜降解真菌的筛选及其降解性能分析
..... 李夏, 顾文杰, 杨少海, 卢钰升, 孙丽丽, 吴杭涛, 解开治.1 (56)
- 一种强力霉素诱导型白念珠菌基因敲除与筛选标记再循环工具包 (英文)
..... 常鹏, 尹华, 王文娟, 陈江野.1 (78)
- 克氏梭菌硫解酶的鉴定及其功能研究 杨娇, 任聪, 徐岩.1 (79)
- 发酵饲料对生长育肥猪结肠微生物发酵及菌群组成的影响 张铮, 朱坤, 朱伟云, 毛胜勇.1 (93)
- ^{13}C -标记秸秆添加对 DNA 稳定性同位素探针试验结果的影响 詹雨珊, 张建伟, 冯有智.1 (103)
- 基于全基因组关联分析研究粪肠球菌发酵食品分离株的耐药性
..... 孙雅如, 李伟程, 余中节, 王旭, 李敏, 王佼, 张和平, 钟智.1 (113)
- 泉古菌醇与绿素在东海陆架区的分布及关系研究 程着, 谢伟, 张传伦.1 (123)
- 驯化复合微生物菌群处理废弃钻井泥浆活性研究
..... 高小龙, 常允康, 侍浏洋, 李晓光, 赵建芳, 沙蓓蓓, 黄志勇, 王兴彪.1 (134)
- 麦积山石窟赋存环境中空气细菌的时空分布特征
..... 段育龙, 武发思, 汪万福, 贺东鹏, 马千, 董广强.1 (145)
- 一株 3-苯氧基苯甲酸降解菌的筛选及其协同 *Bacillus licheniformis* G-04 降解高效氯氰菊酯的研究
..... 胡琼, 唐洁, 刘波, 陈廷廷, 孙擎, 张庆.1 (157)
- 褐藻胶降解菌的筛选、鉴定及产酶条件优化 赵婉琳, 叶静, 张娜, 肖美添, 赵鹏, 黄雅燕.1 (169)
- 基于高通量测序的乐安江冬季细菌群落特征分析 肖汉玉, 王鹏, 刘君政, 李传琼, 李燕, 赵君.1 (181)

- 泸型酒酒醅细菌群落的发酵演替规律 肖辰, 陆震鸣, 张晓娟, 王松涛, 李德林, 沈才洪, 史劲松, 许正宏.1 (195)
- 圈卷产色链霉菌 *san7324* 和 *san7324L* 基因阻断对形态分化和尼可霉素产生的影响 孙军, 李敬敬, 李月, 王川, 蔡原, 谭华荣.2 (235)
- 缺失宿主 Vta1 蛋白的 MIT 结构域对杆状病毒 AcMNPV 复制的影响 孙雨, 李玉英, 王司军, 于乾龙, 岳琦, 李朝飞.2 (247)
- 苏云金芽胞杆菌 Sigma H 对芽胞形成的影响 樊鑫桐, 杜立新, 高坦坦, 彭琦, 张杰, 宋福平.2 (258)
- ¹³⁷Cs 辐照对橘小实蝇雄虫肠道菌群多样性的影响 张琪文, 蔡普默, 张贺贺, 花若晗, 季清娥, 陈家骅.2 (269)
- 食线虫真菌洛斯里被毛孢线粒体基因组的再分析 闫倩倩, 刘杏忠, 张永杰.2 (280)
- 重庆紫色水稻土中“全程”和“半程”氨氧化微生物的垂直分异 万琪慧, 王书玲, 赵伟烨, 马黎华, 贾仲君, 蒋先军.2 (291)
- 乙肝病毒核心蛋白病毒样颗粒表面抗原密度对抗体应答水平的影响 李琪, 汤书兵, 周树敏, 钱志康.2 (303)
- 一株深海热液口嗜热芽孢杆菌 SY27F 代谢产物活性的研究 周洪, 张勤, 何聿, 杨黄浩, 田永奇.2 (314)
- 一种制备新生隐球菌单细胞的方法 周利艳, 付钰.2 (326)
- 天山一号冰川表面冰尘和底部沉积层中可培养酵母菌系统发育类群的分布及生态生理特征 张瑞蕊, 薛梅, 李宁宁, 靳亚梅, 魏小晶, 倪永清.2 (334)
- 肺炎克雷伯菌质粒 p1512-KPC 的测序及比较基因组学分析 蒋昭芳, 赵亚超, 李曼莉, 周冬生, 朱天川, 谭小艳, 童贻刚, 龙军.2 (349)
- 东北湿地沉积物中 T4 型噬菌体 *g23* 基因的多样性 李想, 孙岩, 刘俊杰, 姚钦, 王光华.2 (364)
- 华癸根瘤菌 *urtB* 基因突变株的构建与共生固氮表型分析 周雪娟, 马春草, 李亚楠, 胡倡, 李友国.2 (374)
- 结核分枝杆菌 Rv3194c 蛋白的亚细胞定位 赵东岳, 王德民, 林丹枫.2 (386)
- 黄曲霉毒素 B1 降解菌的筛选及在玉米贮藏中的应用 袁远, 张佩, 何鹏飞, 唐萍, 范黎明, 吴毅歆, 何月秋.2 (395)
- 双组分系统 *rcsC* 基因影响禽致病性大肠杆菌的致病性及相关生物学特性 王栋, 王少辉, 张焕容, 刘新, 许璇, 易正飞, 田明星, 丁铲, 于圣青.3 (468)
- Sulfolobus acidocaldarius* DNA 聚合酶 IV 跨越损伤合成能力的酶学特征 王伟玮, 王风平, 刘喜朋.3 (478)
- 成都平原不同种植方式折耳根表面附生细菌群落结构与抗生素抗性基因分析 芦科堃, 向文良, 卢倩文.3 (489)
- 华癸中慢生根瘤菌 7653R *MCHK-3535* 基因在自生和与紫云英共生中的功能 于艳霞, 侣再勇, 曾小波, 李友国.3 (499)
- “使它隆”对玉米根部不同微生环境细菌群落多样性的影响 单凯, 王春蕾, 方志军, 穆春华, 许艳蕊, 黄晓文, 郝鲁江.3 (510)

- 一株鸭源传染性支气管炎病毒的分离鉴定及结构蛋白基因和血清型分析
..... 范文胜, 唐宁, 董志华, 陈基明, 张文, 赵长润, 韦天超, 磨美兰, 韦平.3 (523)
- 不同生长季节黑果枸杞的根际细菌群落结构(英文)..... 王飞, 杨晓东, 李岩.3 (545)
- 花生根瘤菌 *Bradyrhizobium* sp. MZ5 III 型分泌系统调节基因 *ttsI* 突变体的功能分析
..... 李婷, 李雪, 阮华钦, 赖永秀, 陈静瑜, 胡美娟, 谷峻.3 (546)
- 棕榈科植物种子内生细菌群落多样性的高通量测序分析
..... 刘媛, 渠露露, 叶美迪, 黄曹生, 朱月丹, 王俏然, 李淑彬.3 (554)
- 嗜热细菌 *Anaerobaculum hydrogeniformans* Pif1 解旋酶的异源表达与解旋反应特性
..... 段晓雷, 刘娜女, 张涛, 曹睿, 姜钧耀, 闵迅, 奚绪光.3 (566)
- 蝉传脑炎病毒跨过血脑屏障的体外实验 康晓平, 李裕昌, 吴晓燕, 魏婧靖, 郝淮杰, 姜涛.3 (578)
- slnN* 基因在盐霉素生物合成中的调控功能分析 朱振洪, 李函, 李永泉.4 (632)
- 河南黄河湿地放线菌多样性及植物病害生防放线菌的筛选 习慧君, 臧睿, 刘闯, 赵莹, 文才艺.4 (642)
- 两种象甲幼虫肠道微生物组成及对高单宁食物的适应 郭淑华, 易现峰.4 (657)
- 圣路易斯脑炎病毒 NS2B-NS3 蛋白酶的原核表达及其抑制剂的筛选
..... 周婷婷, 高梦茹, 杜梦繁, 于凡, 冯磊.4 (668)
- 退化高寒草地土壤真菌群落与土壤环境因子间相互关系
..... 李海云, 姚拓, 高亚敏, 张建贵, 马亚春, 路晓雯, 杨晓蕾, 张慧荣, 夏东慧.4 (678)
- 新型耐热 β -1,4-木糖苷酶的重组表达及酶学性质
..... 黄颖, 姚雪妍, 刘腾飞, 米硕甫, 孙丽超, 辛凤姣.4 (689)
- 日粮添加褐藻糖胶对断奶仔猪抗炎能力和肠道微生物多样性的影响
..... 刘萍, 赵金标, 耿正颖, 王军军, 刘岭, 王春林, 郭娉婷, 吴怡, 张刚, 黄冰冰.4 (700)
- 三种大肠杆菌表达的蹄疫病毒 A 型多表位蛋白对猪的免疫原性比较
..... 曹轶梅, 王兴凯, 王省, 李坤, 付元芳, 李冬, 卢曾军, 刘在新.4 (711)
- 嗜盐菌群对酸性金黄 G 的脱色特性和机理
..... 谢静, 郭光, 田芳, 周思懿, 丁克强, 杨凤, 周旺, 刘翀.4 (719)
- 多靶向沉默里氏木霉碳代谢阻遏物对纤维素酶活性和表达的调控研究
..... 邓嘉雯, 高云雨, 刘旭坤, 张珂珂, 钟路遥, 田生礼.4 (730)
- 一株从红藻中分离出的产芳基硫酸酯酶的海单胞菌 FW-1 的全基因组测序及结果分析(英文).....
..... 王婧, 付晓婷, 毛相朝, 许加超, 高昕.4 (752)
- 艾纳香内生真菌 *Diaporthe* sp. 次生代谢产物 元超, 李刚, 张影波, 庞玉新.4 (753)
- 两端融合表达几丁质结合结构域提高几丁质酶抗真菌活性
..... 谷天燕, 刘晓楠, 李玲聪, 刘妍池, 胡少锋, 吕晨茵, 刘华, 赵国刚.4 (762)
- 霍乱弧菌 ToxS 蛋白间的互作增强 ToxR 蛋白诱导毒力基因的表达
..... 王相洪, 张婷, 涂飞, 史梦婷, 王卉, 杨梦华.5 (832)

- 一种蛱源性耐盐耐碱菌株 *Oceanobacillus oncorhynchi* IMH 的首次分离与鉴定.....
 朝木丽格, 额尔敦宝力高, 黄天鹏, 吴咪, 贺海燕, 金凤, 格日勒图.5 (841)
- 假单胞菌 *Pseudomonas fluorescens* Pf0-1 中转录调控因子 SpfB 负调控 DNA 磷硫酰化修饰(英文).....
 王俞苹, 孔令新, 郑涛, 李金丽, 孙溢华, 由德林.5 (862)
- HOG1* MAPK 参与调控亚砷酸钠诱导的酵母细胞凋亡..... 吴丽华, 陈燕飞, 仪慧兰.5 (863)
- 植物根际促生菌 *Bacillus mycoides* Gnyt1 铁载体分泌相关功能基因的挖掘.....
 杨晓玫, 李建宏, 姚拓, 李琦, 冯影.5 (871)
- 饲料类型对茶尺蠖幼虫肠道细菌多样性及幼虫存活率的影响.....
 张勇, 赵天宇, 邓竣丹, 吴珍珍, 杨云秋, 龙雁华.5 (881)
- RNA-Seq 揭示 *Foc4* 在外源氧化胁迫(H_2O_2)下的基因表达及细胞代谢变化..... 齐兴柱, 刘磊, 汪军.5 (891)
- 3A 蛋白 104–115 位氨基酸缺失口蹄疫 A 型标记病毒的构建.....
 李平花, 马雪青, 袁红, 袁子文, 孙普, 白兴文, 卢曾军, 刘在新.5 (907)
- 乳白耙齿菌 F17 对共存菲、蒽的降解差异性..... 刘俊, 吴涓.5 (916)
- 罗非鱼源无乳链球菌肠道拮抗芽孢杆菌的筛选及其生物学特性.....
 高艳侠, 张德锋, 可小丽, 刘志刚, 衣萌萌, 王森, 韩雪晴, 卢迈新.5 (926)
- 新型酵母蛋白表位标记和基因敲除质粒系统的构建及可行性验证.....
 唐仕伟, 李辉, 崔时媛, 张正坦, 谢志平.5 (939)
- 荧光假单胞菌 ZX 对采后锦橙绿霉病的防治及其抑菌机制.....
 王智荣, 梅小飞, 杜木英, 江孟遥, 张洪新, 汪开拓, Zsolt Zalán, Ferenc Hegyi, 阚建全.5 (950)
- 黄曲霉分生孢子色素合成基因 *pks1* 的鉴定及其对生长发育和侵染性的影响.....
 魏鹏霖, 张鹏, 李伟, 汪世华, 尹文兵.5 (965)
- 耐镉甲基营养芽孢杆菌吸附条件的优化及其抗逆性.....
 张冬雪, 文亚雄, 罗志威, 李雪玲, 郑双凤, 谭石勇.7 (1253)
- 珊瑚病原菌株 XSBZ03 和 XSBZ14 双重 PCR 检测方法的建立.....
 杨思悦, 符亚楠, 龙昊, 章翔, 谢珍玉.7 (1266)
- hsc70-4* 基因促进家蚕核型多角体病毒复制增殖.....
 陈鹏, 包希艳, 董战旗, 康涛涛, 朱艳, 潘敏慧, 鲁成.7 (1275)
- VP3 G–H 环中氨基酸突变对 O 型口蹄疫病毒生物学特性的影响.....
 陈冬冬, 白兴文, 宫晓华, 包慧芳, 李平花, 李冬, 付元芳, 白启峰, 袁红, 孙普, 马雪青,
 曹轶梅, 陈应理, 卢曾军, 刘在新.7 (1285)
- 南大西洋中脊热液区异化铁还原微生物及其矿化产物分析..... 李光玉, 曾湘, 邵宗泽.7 (1295)
- 一株虾池来源的螺旋拟柱孢藻藻株的分离鉴定及重金属离子 Cu^{2+} 、 Cd^{2+} 和 Pb^{2+} 对其生长的影响.....
 聂利华, 杨东娟, 刘亚群, 韩博平, 马秀兰, 查广才.7 (1307)
- 多形拟杆菌肝素酶 I 的 SUMO 融合表达及酶学特性分析.....
 张川, 张悦, 丁啸虎, 李中媛, 宋亚国, 罗学刚.7 (1318)

- 嗜盐噬菌弧菌 BALOs10 菌株的分离、鉴定及其裂解谱 叶晓声, 赵何, 陈明霞, 李和阳, 何小玉.7 (1331)
- 不同盐度胁迫下杜氏盐藻全转录组测序及注释... 张晓钊, 李亮, 何宁芳, 龚雪晴, 主朋月, 王晓阳.7 (1342)
- 不同酿酒酵母菌株来源异麦芽糖酶 IMA1 的克隆、表达及表征(英文) 叶进前, 赵勇山, 杜昱光, 李建军.7 (1362)
- 香蕉假茎生物炭对根际土壤细菌丰度和群落结构的影响 王明元, 侯式贞, 董涛, 张敏瑜, 刘建福, 徐志周.7 (1363)
- 土壤中可编码乌头酸异构酶的芽胞杆菌菌株筛选及鉴定 郑操, 蔡鹭, 张中强, 王立华, 戴余军, 都萃颖.7 (1373)
- 外源酚酸诱导枳菌根共生相关基因筛选 王明元, 李建福, 刘建福, 徐志周, 林萍, 李雨晴.7 (1383)
- 新生隐球菌一个新的产孢相关蛋白 Srp1 的鉴定与功能分析 范成莉.7 (1395)
- 家蚕 ADP/ATP 转运酶(BmANT)抑制 BmNPV 增殖作用机制研究 董战旗, 蒋亚明, 陈鹏, 潘敏慧.8 (1474)
- 黄渤海海草分布区日本鱼曼草根际微生物群落结构特征及其功能分析 刘鹏远, 张海坤, 陈琳, 孙延瑜, 王彩霞, 宋虹, 胡晓珂.8 (1484)
- 茎瘤固氮根瘤菌环二鸟苷酸代谢相关基因的功能鉴定 杨学智, 沈日敏, 孙雨, 李润植, 解志红.8 (1500)
- 不同处理条件对介质阻挡放电低温等离子体杀菌效果及影响机理研究 马良军, 王佳媚, 黄明明, 章建浩, 严文静.8 (1512)
- 马缨杜鹃根系微生物群落结构及其变化 方敏, 徐小蓉, 唐明, 唐婧.8 (1522)
- 基于空腔填充效应构建伯克霍尔德菌脂肪酶 LipA 的热稳定性突变体 刘艳如, 李鑫, 董盼盼, 黄建忠, 舒正玉.8 (1535)
- 色素生物合成相关 *PigE* 基因的缺失对紫色红曲霉 Mp-21 黄色素种类和产量的影响(英文) 王嘉琦, 张琪, 江北, 吕梦霞, 蒋冬花.8 (1560)
- 滇金丝猴粪便微生物来源的 β -半乳糖苷酶基因的表达及酶学性质 张文洪, 杨雁霞, 杨正凤, 黄遵锡, 李俊俊, 唐湘华, 杨云娟, 吴倩, 慕跃林, 韩楠玉, 许波.8 (1561)
- 艾比湖湿地芦苇根际土壤氨氧化古菌的多样性和群落结构 贺帅兵, 胡文革, 靳希桐, 周婷婷, 钟镇涛, 王月娥.8 (1576)
- 辣椒疫霉质外体疏水小蛋白 SCR82 编码基因的转录特征、异源表达和功能 张子辉, 黄沈鑫, 陶航, 张烨, 赵耀, 纪兆林, 陈孝仁.8 (1586)
- 不同时期艾比湖湿地盐角草群落土壤固氮微生物的多样性分析 靳希桐, 胡文革, 贺帅兵, 周婷婷, 王月娥, 钟镇涛.8 (1600)
- 嗜虫耶尔森氏菌 HlyA 及 HasA 外分泌表达系统的构建 黄晨燕, 郑茹萍, 黎钟秀, 余云钦, 罗雨琦, 周建双, 张飞萍, 吴松青.8 (1612)
- dlt* 操纵子赋予苏云金芽胞杆菌对阳离子抗菌肽的抗性和对昆虫的毒力(英文) 邬欢, 王海文, 朱丽, 魏旭艳, 王兵, 宋春旭, 余子全.10 (1914)

- 不同磷、硫及二氧化碳浓度对标志链带藻生长和碳水化合物积累的影响 黄怡, 高保燕, 王飞飞, 戴晨明, 苏敏, 张成武.10 (1915)
- 恶臭假单胞菌 SJTE-1 中转化 17 β -雌二醇的 3-酰基-ACP 还原酶的鉴定与功能研究(英文)..... 彭万里, 古丽米娜, 郑达宁, 梁如冰.10 (1936)
- 副溶血弧菌 SH112 株 OmpA 蛋白的高效表达及免疫学特性..... 王亚磊, 王权, 白雪瑞, 别闯南, 陈兆国, 韩先干, 蒋蔚.10 (1937)
- 基于 16S rRNA 基因序列分析法比较苏尼特双峰驼和阿拉善双峰驼自然发酵酸驼乳的微生物多样性 卓娜, 伊丽, 浩斯娜, 吉日本图.10 (1948)
- 茄科作物青枯菌 NADH 脱氢酶 F 亚基在细胞运动和致病性中的功能研究(英文)..... 童建华, Gibson Kamau Gicharu, 户勋, 范晓静, 卓涛, 邹华松.10 (1968)
- 一株拮抗黄单胞菌的贝莱斯芽孢杆菌的分离和鉴定 李生樟, 陈颖, 杨瑞环, 张翠萍, 刘昭, 李逸朗, 陈涛, 陈功友, 邹丽芳.10 (1969)
- 健康与感染青枯病烟株根标土壤与茎科细菌群落结构与多样性 向立刚, 周浩, 汪汉成, 李震, 陈乾丽, 余知和.10 (1984)
- 茎瘤固氮根瘤菌 ORS571 GGDEF 和 EAL 结构域蛋白的预测及功能研究(英文) 孙雨, 解志红, 刘卫, 郭洪恩.10 (2012)
- Pseudomonas putida* KT2440 低特异性 L-苏氨酸醛缩酶的表达、酶学性质及温度稳定性提高 李利宏, 张荣珍, 周丽仙, 柳志永, 旋凯昂, 饶俊超, 徐岩.10 (2013)
- 定殖植物根内和根围放线菌的分离鉴定及其体外抑菌促生效应 宁楚涵, 李文彬, 张晨, 刘润进.10 (2024)
- 巨菌草不同生长时期对砒砂岩地区土壤理化性质及细菌群落结构的影响 梅兰, 黄在兴, 宋昭昭, 贾雨雷, 苏德伟, 林辉, 林占熿.10 (2038)
- 代谢改造熊蜂生假丝酵母提高酸型槐糖脂产量 张疆睿, 张利华, 石依博, 沈微, 樊游, 陈献忠.11 (2094)
- 中国猪种布鲁氏菌分子流行病学特征分析 刘志国, 王妙, 赵鸿雁, 朴东日, 路殿英, 李振军.11 (2017)
- 海草根际微生物与海草植株的互作效应 周卫国, 丁德文, 凌娟, 林显程, 杨清松, 张颖, Manzoor Ahmad, 张燕英, 董俊德.11 (2117)
- 桑树内生拮抗菌的分离鉴定及其对桑断枝烂叶病的生防初探 王若琳, 徐伟芳, 王飞, 周小磊, 郑月, 江鸿森, 谢洁.11 (2130)
- 嗜热厌氧菌 *Caldicellulosiruptor* sp. F32 中降解 β -1,3-1,4 葡聚糖水解酶的协同性分析及糖基化对 F32EG5 热稳定性影响 冯杰, Hamed I. Hamouda, Nasir Ali, 王雨铭, 张培玉, 吕明.11 (2144)
- 钴 60 诱变选育平菇新菌株的研究 宋冰, 李雪飞, 史泽宇, 李长田, 付永平, 李玉.11 (2155)
- NaCl 胁迫下哈茨木霉 ACCC32524 的转录组和代谢组分析 向杰, 陈敬师, 夏鑫鑫, 刘快, 李世贵, 顾金刚.11 (2165)
- 蜡状芽孢杆菌 S458-1 对水产养殖系统中水质调节的作用 章文锦, 张皎皎, 李艳红, 蒋艳红, 姚维志, 吴正理.11 (2182)

泰安滦河中产 ESBLs 大肠杆菌耐药性及耐药基因的传递规律	衣首静, 刘青霄, 蒋智宇, 孙淑红.11 (2194)
双功能尿苷酰转移/去除酶 GlnD 在谷氨酸棒杆菌 JNR 中的功能	李静, 徐美娟, 舒群峰, 赵雅雯, 唐蜜, 张显, 杨套伟, 许正宏, 饶志明.11 (2206)
瘤胃微生物元基因组来源的新的组成型启动子获取	王丽, 赵云, 杨茜, 戴欣, 朱雅新, 董志扬.11 (2218)
苏云金芽胞杆菌 BkdR 和 CcpA 对 bkd 基因簇的转录调控	温继龙, 彭琦, 赵欣, 张杰, 宋福平.11 (2229)
黄海日照海域部分可培养细菌的分离、初步鉴定及产琼胶酶细菌的筛选	刘昂, 王爽, 杜峰, 薛庆节, 李秀真.11 (2240)
水稻种子内生泛菌(<i>Pantoea</i> spp.)系统发育多样性及其促生功能	郭鹤宝, 何山文, 王星, 章俊, 张晓霞.12 (2285)
耐甲氧西林金黄色葡萄球菌 MRSA252 辅酶 A 二硫化物还原酶缺失延缓苯唑西林的次级损伤效应	杨萍, 刘蕾, 蒋宇, 孙兵兵, 杨俊杰, 李琦, 杨晟, 陈代杰.12 (2296)
镉对超积累和非超积累生态型东南景天内生细菌多样性的影响	邹淑华, 邓平香, 龙新宪.12 (2306)
生物有机肥对土壤微生物群落结构变化及西瓜枯萎病的调控	朱菲莹, 张屹, 肖姬玲, 魏林, 梁志怀.12 (2323)
矿区复合污染土壤真菌多样性及其对稀土-重金属离子的吸附特征	袁浩, 卢梦涵, 刘宏伟, 刘菊梅, 包苏日古嘎, 何倩, 李海波, 曹伟伟, 赵吉, 包智华.12 (2334)
蝇虫草线粒体 DNA 与细胞核 DNA 进化关系的比较	张姝, 崔宁波, 赵宇翔, 张永杰.12 (2346)
L1.LtrB 内含子编码蛋白反转录结构域关键催化位点分析及功能验证	陈相好, 张峥嵘, 刘芳, 陈峥宏, 洪伟, 綦廷娜, 谷俊莹, 崔古贞.12 (2357)
桑椹肥大性菌核病菌(<i>Ciboria shiraiana</i>)分生孢子的形成和致病性(英文)	吕蕊花, 朱攀攀, 余茂德, 刘长英, 赵爱春.12 (2377)
分枝杆菌丝氨酸/苏氨酸蛋白激酶 PknK 的功能研究	周怡璇, 周心童, 杨健, 胡新玲, 米凯霞.12 (2378)
家蚕 CVDAR 品系对 BmNPV 的抗性特征分析	秦琪, 董战旗, 雷雪蛟, 曹明亚, 唐亮, 石美宁, 潘敏慧.12 (2390)
烤后不同霉变程度烟叶际真菌群落组成与多样性分析	陈乾丽, 李忠, 汪汉成, 黄宇, 蔡刘体, 谢红炼, 周浩.12 (2401)
根际微生物组介导的解淀粉芽孢杆菌 FH-1 对水稻的促生机制	李晴晴, 徐松, 赵维, 杨榕, 赵思崎, 黄志勇, 王敬敬.12 (2410)
泸型酒窖泥中梭菌的分离及代谢产物分析	蒲秀鑫, 柴丽娟, 徐鹏翔, 张晓娟, 陆震鸣, 王松涛, 沈才洪, 史劲松, 许正宏.12 (2427)
《微生物学报》2019 年全年总目录	12 (2437)

(卷终)

ACTA MICROBIOLOGICA SINICA

2019 Vol.59 No.1–12

CONTENTS

Geomicrobiology

- The special issue of geomicrobiology in 2019..... Wenjun Li, Hongchen Jiang.6 (i)
- Recent advances on the novel methanogens Changhai Duan, Cuijing Zhang, Yihua Sun, Meng Li.6 (995)
- Molecular biological technologies applied in geo-microbiology of terrestrial geothermal environments
..... Qing He, Shang Wang, Ye Deng.6 (1011)
- Biological carbon pump effect of microalgae in aquatic ecosystems of karst areas
..... Zhuang Yan, Xiayu Wang, Wei Li, Longjiang Yu.6 (1025)
- Effect of different depressurization process on cultivable bacterial community composition of deep-sea water
..... Xuegong Li, Weijia Zhang, Lihong Zhou, Fenghai Cai, Longfei Wu.6 (1034)
- Diversity and sulfur oxidation characteristics of cultivable sulfur oxidizing bacteria in hydrothermal fields of
Okinawa Trough..... Rui Du, Min Yu, Jingguang Cheng, Jingjing Zhang, Xiaorong Tian, Xiaohua Zhang.6 (1049)
- Isolation of antibacterial and culturable bacteria from Arctic tundra soils
..... Ruihan He, Zongjun Du, Yongyu, Huirong Li.6 (1062)
- Distribution characteristics of *Bacillus*-like species of Xiaokong Mountain volcanic valley in Tengchong County, Yunnan
Province Guohong Liu, Bo Liu, Jieping Wang, Yujing Zhu, Zheng Chen, Jianmei Che, Qianqian Chen.6 (1075)
- Microbial community structure characteristics in different mine drainage lakes of an iron mine in Anhui Province
..... Zimin Cao, Joseph Frazer Banda, Lixin Pei, Pengfei Wei, Ruirui Xin, Huiyuan Dong, Chunbo Hao.6 (1087)
- Distribution and diversity of sulfuroxidizing bacteria in the surface sediments of Tibetan hot springs
..... Li Zhen, Geng Wu, Jian Yang, Hongchen Jiang.6 (1104)
- Aerobic methane oxidation under distinct shrinkage scenario of Lake Ganggeng in Inner Mongolia Autonomous
Region Yongliang Mo, Yan Zheng, Feng Jin, Taogetao Baoyin, Zhongjun Jia.6 (1114)
- Aerobic methane oxidation in typical grassland soil
..... Yufang Wang, Yuanfeng Cai, Fujiang Hou, Zhongjun Jia, Saman Bowatte.6 (1125)
- Nitrogen-fixing microbial diversity and its influencing environmental variables in waters Three Gorges Reservoir
..... Weiye She, Can Feng, Jian Yang, Hongchen Jiang.6 (1142)
- Community structure and distribution of anammox bacteria in different habitat.....
..... Yiguo Hong, Tianzheng Huang, Yiben Li, Jiapeng Wu, Lijing Jiao, Mingchao Cui.6 (1155)
- Interactions between bacteria and phytoplankton in microbial communities under cadmium contamination conditions
..... Zunji Shi, Zheng Cao, Kexin Hu, Xinbi Peng, Yifan Zhu, Bo Xie.6 (1163)

- Overexpression of *Na, K-ATPase* gene enhanced the weathering ability of *Aspergillus niger* to wollastonite
 Jingjing Sun, Chengfeng Yu, Ziyu Fu, Bin Lian.6 (1173)
- Microbial community and the type of methanogenesis associated with biogenic gas in Luling Coalfield, China....
 Yafei Liu, Bobo Wang, Hongxun Zhang, Zhisheng Yu.6 (1187)
- Application of microalgae-bacteria symbiosis system in wastewater treatment.....
 Yongrui Pi, Yonghong Lv, Ying Liu, Yongzheng Tang, Li Gao, Mutai Bao.6 (1196)
- Effect of interaction between pristine thermophilic bacteria and bentonite on anti-swelling of oil reservoir
 Xiaoli Hu, Wei Zhang, Deng Liu, Xuan Qiu, Hongmei Wang.6 (1208)

Gut Microbes

- The “Gold Rush Era” for microbiome Research Yongfei Hu.9 (1631)
- Effect of oral administration of streptomycin sulfate on symptoms and gut microbiota of Parkinson's disease mice.....
 Yunying An, Minna Wu, Puze Li, Xinrui Jing, Jianfeng Zhang, Hongfei Xue, Baoguo Deng, Genshen Zhong.9 (1650)
- Correlation of gut microbiota with IL-17 and IFN- γ in experimental autoimmune encephalomyelitis
 Xiaoling Li, Bo Zhang, Mengjiao Sun, Caicai Bao, Manxia Wang.9 (1659)
- Gut microbiota in diabetic patients and diabetic patients with cardiovascular complications.....
 Xi Chen, Yong Xue, Xiaofeng Song, Baoli Zhu.9 (1673)
- Gut bacterial community diversity in healthy Tibetan and Han college students
 Yixuan Liu, Pengxi Cao, Hongmei Ma, Xing Liu.9 (1684)
- Diversity of intestinal microbiota of Caracal cat (*Caracal caracal*) by high-throughput sequence of the bacterial
 16S rRNA gene Lei Chen, Mi Liu, Weilai Sha, Ying Gao, Jiaxin Chen, Jing Zhu.9 (1685)
- Effect of low-protein diet on hormones associated with growth and on gut microbiota in weaned piglets.....
 Defu Yu, Xiaofeng Zhu, Jiangyin Feng, Cuicui Kang, Mingyu Zhang, Weiyun Zhu, Suqin Hang.9 (1704)
- Microbial diversity in *Martianus dermestoides* at different stages based on high-throughput sequencing technology
 Changwen Wang, Liu Fang, Yunjiang Liang, Shichen Huang, Weiwei Dong.9 (1713)
- Influence of corn-rich diet on mice gut microbiota structure and function
 Shuai Zheng, Chunmei Piao, Zhi Zhang, Tingting Liu, Jijing Wang, Lvya Wang, Jie Du.9 (1722)
- Diversity and sex-specific differences in the intestinal microbiota of cheetah (*Acinonyx jubatus*).....
 Lei Chen, Mi Liu, Jing Zhu, Ying Gao, Jiaxin Chen, Weilai Sha.9 (1723)
- Advances in microbiota-gut-brain axis Kan Gao, Chunlong Mu, Weiyun Zhu.9 (1746)
- MicroRNA responses in the larval gut of *Apis cerana cerana* to *Ascosphaera apis* stress
 Yu Du, Xinyu Tong, Dingding Zhou, Dafu Chen,
 Cuiling Xiong, Yanzhen Zheng, Guojun Xu, Haipeng Wang, Huazhi Chen, Yilong Guo, Qi Long, Rui Guo.9 (1763)
- Effects of *Lactobacillus animalis* LGM on transcription factors gene expressions in DSS-induced colitis mice
 Yingzhou Cheng, Chunlong Mu, Weiyun Zhu.9 (1777)

- Research progress of human intestinal segmented filamentous bacteria Huahai Chen, Liu Wu, Cheng Tang, Xin Wang, Yesi Yin.9 (1785)
- Genetic diversity of *Lactobacillus reuteri* isolated from intestines Zhongjie Yu, Jie Zhao, Yuqin Song, Zhihong Sun.9 (1797)
- Cloning, expression and function of an alkaline resistance endo-glucanase gene isolated from guts of earwig Junmei Chen, Wenpeng Li, Suyu Zhao, Bingfen Huang, Bowen Wang, Fengli Hui, Xiaoyan Yin, Qiuhong Niu.9 (1812)
- Advances in research on association analysis methods between gut functional metagenomics and metabolomics .. Luwen Hou, Changxin Wu, Xuemei Qin, Jianguo Li.9 (1822)
- PacBio SMRT sequencing of the intestinal flora composition in patients with gestational diabetes mellitus Mingyue Shu, Aisi Fu, Jie Zhang, Jia Chen, Jing Guo, Qiong Ding, Yancheng Xu, Tiangang Liu.9 (1839)

REVIEWS

- Research progress on the genus *Cellulomonas* Yunlei Shi, Liyan Yu, Yuqin Zhang.1 (10)
- Key players involved in methanogenic degradation of organic compounds: progress on the cultivation of syntrophic bacteria Xue Zhang, Hui Zhang, Lei Cheng.2 (223)
- Role of autophagy in the reproduction of pathogenic fungi Chengli Fan, Anni Chang, Tongbao Liu.2 (224)
- Bacterium-like particles—a novel surface display technology for lactic acid bacteria and its application Jianzhong Wang, Jianwei Zhao, Chunfeng Wang.3 (419)
- Advances in biosynthesis of proteasome inhibitor syrbactins Xiaotong Liu, Xiaokun Xu, Youming Zhang, Aiyong Li.3 (432)
- Research Progress in production and measurement of neuraminidase from *Streptococci* spp. Yufeng Fan, Guangjin Liu.3 (441)
- Microbial degradation of environmental estrogens Kejian Tian, Fanxing Meng, Hongliang Huo.3 (453)
- Advance of the diversity of bacterial quorum sensing and quorum quenching Feng Sun, Huicong Yan, Meizhen Wang.3 (467)
- Innovations for directed evolution of terpenoid synthases Zhihui Hu, Yanru Weng, Bingxu Chen, Aiqun Yu, Dongguang Xiao.4 (600)
- Research progress on structure of Flavivirus NS2B-NS3 protease Chen Wu, Haitao Yang, Zefang Wang.4 (611)
- Characteristics of immune response induced by avian *Salmonella* Chao Yin, Lijuan Xu, Qiuchun Li, Zhiming Pan, Shizhong Geng, Xin'an Jiao.4 (620)
- Role of *Vibrio parahaemolyticus* secretion system in pathogenicity Lili Mu, Ben Niu, Yong Zhao.4 (631)
- Microbe-mediated ruminal ammonia production in ruminants and its impacts on rumen function Yixuan Xu, Zhipeng Li, Junshi Shen, Weiyun Zhu.5 (788)
- Research progress in protein methylation in archaea Xiaoyun Han, Binyuan Zhai, Yulong Shen.5 (798)

Recent advances on the genus <i>Kibdelosporangium</i>	Youwei Xiong, Jihong Jiang, Sheng Qin.5 (808)
Novel strategies for screening functional viral receptors and their applications .....	..... Huimin Sun, Su Li, Wenjing Wang, Hua-Ji Qiu.5 (820)
Microcins—Antibacterial peptides secreted by Enterobacteria.....	..... Xuan liang, Yu Zhang, Yejun Wang, Guoqiang Zhu.5 (831)
Research progress of DegP in Gramnegative bacteria	Changyu Wang, Mingshu Wang, Anchun Cheng.7 (1221)
Research advances in the virulence and antibiotics resistance mechanism of <i>Riemerella anatipestifer</i> .....	..... Mafeng Liu, Xiu Tian, Anchun Cheng.7 (1231)
Sirtuins mediated lifespan regulation in <i>Saccharomyces cerevisiae</i>.....	.....Mingguang Li, Yong Jiang, Jianhui Cai.7 (1240)
Diversity of extremophiles and metabolites in the deep-sea .....	..... Wei Tang, Jun Zhang, Guangshan Li, Yue Wang, Zengguo He.7 (1252)
Evolutionary insights into the emergence of pyoverdine non-producing mutants in <i>Pseudomonas</i>.....	..... Xiu Zhang, Haikui Chen, Xue-Xian Zhang.8 (1418)
Advances in studying bacterial resistance to antimicrobial peptides .....	..... Yufei Wang, Xiangshu Chen, Linglin Zhang.8 (1428)
Regulating inorganic phosphate transport and mediating bacterial resistance by PstS and PstB.....	..... Peng Zhang, Long Wang, Mingjie Xie.8 (1436)
Novel potential treatments for chronic hepatitis B virus infections .....	..... Jinwei Zheng, Quan Yuan, Ningshao Xia.8 (1451)
Research progress in equol-producing bacteria and their metabolism.....	Yunfei Hu, Huahai Chen, Yesi Yin.8 (1462)
Advances in dissimilatory sulfur oxidation pathways in thermophilic archaea .....	.....Lijun Liu, Yang Wang, Shuangjiang Liu, Chengying Jiang.8 (1473)
Research progress in mushroom virus	Xuefei Li, Bing Song, Yu Li.10 (1854)
Advances in detection of <i>Vibrio cholerae</i> infection.....	Weiwei Fang, Hengliang Wang, Xiaohui Li, Ying Lu.10 (1863)
Research progress in secondary metabolites from fungus-growing insects associated actinomycetes .....	..... Jianhua Wei, Jingjing Li, Jinfeng Ni.10 (1871)
Research progress of griffithsin.....	Lan Li, Qisheng Zheng, Jibo Hou.10 (1879)
Prospective of the researches on microbiota of spotted wing Drosophila.....	Xiaoli Bing, Yijia Lu.10 (1888)
Research progress of hyperthermophilic archaeal DNA repair endonucleases .....	..... Yuting Li, Haoqiang Shi, Likui Zhang.10 (1896)
Research progress in transcriptional regulation of prodigiosin biosynthesis in <i>Serratia marcescens</i> .....	..... Di Sun, Cong Liu, Weijie Liu.11 (2060)
Functions of type III effectors from multigenic family of <i>Ralstonia solanacearum</i> in plant disease development and immunity defense system	Li Chen, Qianzhuo Wei, Kouhei Ohnishi.11 (2061)
Advances in research for controlling fruits and vegetables diseases by using <i>Pseudomonas fluorescens</i> .....	.....Xiaofei Mei, Zhirong Wang, Jianquan Kan.11 (2082)

- GSDMD-mediated pyroptosis in infectious diseases Ruiqing Liu, Shengyu Li, Yanna Shen.11 (2093)
- Advance in polyethylene terephthalate degrading enzyme..... Xiu Li, Haitao Yang, Zefang Wang.12 (2262)
- Cell models for studying HBV infection and replication *in vitro*
..... Mingfeng Wang, Jiali Cao, Quan Yuan, Ningshao Xia.12 (2275)
- Advances in regulation of endogenous trehalose metabolism in yeast.....
..... Dunwu Chen, Xiong Chen, Xin Li.12 (2284)

RESEARCH ARTICLES

- Isolation, identification and characterization of a Cd resistant bacterium
..... Qian Li, Ping Zhang, Bohan Liao, Peiqin Peng, Jinxing Mei, Jimin Xu.1 (24)
- Elucidation of an intercalation structure of the gene cluster for nonribosomal peptide Surugamides biosynthesis.....
..... Chunmin Xu, Xiao Lin, Lei Li, Shuping Wang, Fan Yang, Shihai Xu, Hai Deng, Yongjun Zhou, Houwen Lin.1 (36)
- Effect of *N*-glycosylation on enzymatic properties of β -glucosidase from *Talaromyce leycettanus*
..... Xinxin Li, Yingguo Bai, Chen Hua, Rui Ma, Pengjun Shi, Huiying Luo, Bin Yao.1 (47)
- Antibacterial compounds from fungus *Talaromyces stipitatus* WH4-2
..... Wei Jiang, Zhe Zhang, Tizhuang Shan, Mengran Zhao, Li Miao.1 (55)
- Screening of a plastic mulch film degrading fungus.....
..... Xia Li, Wenjie Gu, Shaohai Yang, Yusheng Lu, Lili Sun, Hangtao Wu, Kaizhi Xie.1 (67)
- A doxycycline-inducible gene deletion and marker recycling toolkit in *Candida albicans*.....
..... Peng Chang, Hua Yin, Wenjuan Wang, Jiangye Chen.1 (68)
- Identification and functional analysis of the three thiolases from *Clostridium kluyveri*
..... Jiao Yang, Cong Ren, Yan Xu.1 (92)
- Effect of a fermented feed on colonic fermentation and microbial composition in finishing pig
..... Zheng Zhang, Kun Zhu, Weiyun Zhu, Shengyong Mao.1 (102)
- Effect of ^{13}C -labeled straw on the results of DNA stable isotope probing experiments.....
..... Yushan Zhan, Jianwei Zhang, Youzhi Feng.1 (112)
- Genome-wide association study on the antibiotic resistance of *Enterococcus faecalis* isolated from natural fermented food
..... Yaru Sun, Weicheng Li, Zhongjie Yu, Xu Wang, Min Li, Jiao Wang, Heping Zhang, Zhi Zhong.1 (122)
- Distribution and relationship between crenarchaeol and chlorin in East China Sea Continental Shelf.....
..... Zhuo Cheng, Wei Xie, Chuanlun Zhang.1 (133)
- Treatment of waste drilling mud by domesticated complex microbial flora
..... Xiaolong Gao, Yunkang Chang, Liuyang Shi, Xiaoguang Li, Jianfang Zhao, Beibei Sha, Zhiyong Huang, Xingbiao Wang.1 (144)
- Spatial and temporal distribution characteristics of the airborne bacteria in the Majijishan grottoes, China.....
..... Yulong Duan, Fasi Wu, Wanfu Wang, Dongpeng He, Qian Ma, Guangqiang Dong.1 (156)
- Screening of a 3-phenoxybenzoic acid degrading strain and its co-degradation with *Bacillus licheniformis* G-04 to
degrade beta-cypermethrin..... Qiong Hu, Jie Tang, Bo Liu, Tingting Chen, Qing Sun, Qing Zhang.1 (168)
- Screening, identification and fermentation optimization of an alginate-degrading strain
..... Wanlin Zhao, Jing Ye, Na Zhang, Meitian Xiao, Peng Zhao, Yayan Huang.1 (180)
- Characteristics of bacterial community in Le'an River in winter based on highthroughput sequencing
..... Hanyu Xiao, Peng Wang, Junzheng Liu, Chuanqiong Li, Yan Li, Jun Zhao.1 (194)

- Bacterial community succession in fermented grains of Luzhou-flavor baijiu
 Chen Xiao, Zhenming Lu, Xiaojuan Zhang, Songtao Wang, Delin Li, Caihong Shen, Jinsong Shi, Zhenghong Xu.1 (204)
- Effects of *san7324* and *san7324L* disruption on morphological differentiation and nikkomycin production of *Streptomyces ansochromogenes* Jun Sun, Jingjing Li, Yue Li, Chuan Wang, Yuan Cai, Huarong Tan.2 (246)
- Effects of deletion of MIT domains of host Vta1 on replication of *Autographa californica multiple nucleopolyhedrovirus*
 Yu Sun, Yuying Li, Sijun Wang, Qianlong Yu, Qi Yue, Zhaoifei Li.2 (257)
- Effect of Sigma H on sporulation in *Bacillus thuringiensis*
 Xintong Fan, Lixin Du, Tantan Gao, Qi Peng, Jie Zhang, Fuping Song.2 (268)
- Effects of ^{137}Cs radiation on the diversity of bacterial communities in male *Bactrocera dorsalis* (Hendel)
 Qiwen Zhang, Pumo Cai, Hehe Zhang, Ruohan Hua, Qing'e Ji, Jiahua Chen.2 (279)
- Reanalysis of the mitochondrial genome of the nematophagous fungus *Hirsutella rhossiliensis*.....
 Qianqian Yan, Xingzhong Liu, Yongjie Zhang.2 (290)
- Vertical abundance variations of “incomplete ammonia oxidizers” and “comammox” in purple paddy soil in Chongqing
 Qihui Wan, Shuling Wang, Weiye Zhao, Lihua Ma, Zhongjun Jia, Xianjun Jiang.2 (302)
- Correlation between antigen density on the surface of hepatitis B virus core protein virus-like particles and their antibody response
 Qi Li, Shubing Tang, Shumin Zhou, Zhikang Qian.2 (313)
- Evaluating bioactivity of metabolites of a hydrothermal *Bacillus* sp. SY27F from the deep-sea hydrothermal vent
 Hong Zhou, Qin Zhang, Yu He, Huanghao Yang, Yongqi Tian.2 (325)
- Using cell sorting techniques to explore the recovery of individual *Cryptococcus neoformans* cells
 Liyan Zhou, Yu V. Fu.2 (333)
- Phylogeny and diversity of culturable yeasts in supraglacial cryoconite and subglacial sediments of the Glacier No.1 in Tianshan Mountains
 Ruirui Zhang, Mei Xue, Ningning Li, Yamei Jin, Xiaojing Wei, Yongqing Ni.2 (348)
- Sequencing and comparative genomics analysis of *Klebsiella pneumoniae* plasmid p1512-KPC.....
 Zhao Fang Jiang, Yachao Zhao, Manli Li, Dongsheng Zhou, Tianchuan Zhu, Xiaoyan Tan, Yigang Tong, Jun Long.2 (363)
- T4-type bacteriophage genetic diversity in wetland sediments in northeast China.....
 Xiang Li, Yan Sun, Junjie Liu, Qin Yao, Guanghua Wang.2 (373)
- Construction and analysis of symbiotic phenotypes of *urtB* mutant in *Mesorhizobium huakuii* 7653R.....
 Xuejuan Zhou, Chuncao Ma, Yanan Li, Chang Hu, Youguo Li.2 (385)
- Subcellular localization of Rv3194c protein from *Mycobacterium tuberculosis*
 Dongyue Zhao, Demin Wang, Danfeng Lin.2 (394)
- Screening and application of an antagonistic bacterium against *Aspergillus flavus*.....
 Yuan Yuan, Pei Zhang, Pengfei He, Ping Tang, Liming Fan, Yixin Wu, Yueqiu He.2 (404)
- Two-component system *rcsC* gene affects pathogenicity and associated biological characteristics of avian pathogenic *Escherichia coli*.....
 Dong Wang, Shaohui Wang, Huanrong Zhang, Xin Liu, Xuan Xu, Zhengfei Yi, Mingxing Tian, Chan Ding, Shengqing Yu.3 (477)
- Enzymatic characterization of translesion synthesis by *Sulfolobus acidocaldarius* DNA polymerase IV
 Weiwei Wang, Fengping Wang, Xipeng Liu.3 (488)

- Bacterial community structure and antibiotic resistance gene on the surface of *Houttuynia cordata* Thunb from different planting patterns in Chengdu plain..... Kekun Lu, Wenliang Xiang, Qianwen Lu.3 (498)
- Role of Mesorhizobium huakuii 7653R *MCHK*-3535 gene in the free living condition and symbiosis with *Astragalus sinicus*..... Yanxia Yu, Zaiyong Si, Xiaobo Zeng, Youguo Li.3 (509)
- Effects of “starane” on the diversity of bacterial communities in different microenvironment of maize roots Kai Shan, Chunlei Wang, Zhijun Fang, Chunhua Mu, Yanrui Xu, Xiaowen Huang, Lujiang Hao.3 (522)
- Identification and analysis of structural protein genes and serotype of an infectious bronchitis virus in ducks Wensheng Fan, Ning Tang, Zhihua Dong, Jiming Chen, Wen Zhang, Changrun Zhao, Tianchao Wei, Meilan Mo, Ping Wei.3 (532)
- The rhizosphere bacterial community dynamics of the halophyte *Lycium ruthenicum* in different growth stages ... Fei Wang, Xiaodong Yang, Yan Li.3 (533)
- Construction of regulatory gene *ttsI* mutant in type III secretion system of *Bradyrhizobium* sp. MZ5 and its function analysis Ting Li, Xue Li, Huaqin Ruan, Yongxiu Lai, Jingyu Chen, Meijuan Hu, Jun Gu.3 (553)
- Diversity of bacterial endophytes communities in the seeds of several Palmae plants via high throughput sequencing Method..... Yuan Liu, Lulu Qu, Meidi Ye, Caosheng Huang, Yuedan Zhu, Qiaoran Wang, Shubin Li.3 (565)
- Heterologous expression and characterization of unwinding reaction of Pif1 helicase from *Anaerobaculum Hydrogeniformans*..... Xiaolei Duan, Nanli Liu, Tao Zhang, Rui Cao, Junyao Jiang, Xun Min, Xuguang Xi.3 (577)
- In vitro* experiment for tick borne encephalitis virus transmitting across the blood brain barrier..... Xiaoping Kang, Yuchang Li, Xiaoyan Wu, Jingjing Wei, Huaijie Hao, Tao Jiang.3 (586)
- Regulation of *slnN* gene in salinomycin biosynthesis Zhenhong Zhu, Han Li, Yongquan Li.4 (641)
- Diversity of actinobacteria in Henan Yellow River wetland and screening of cultivable actinobacteria with biological control on plant disease..... Huijun Xi, Rui Zang, Chuang Liu, Ying Zhao, Caiyi Wen.4 (656)
- Gut bacterial composition of two *Curculio* species and their adaptation to hightannin food..... Shuhua Guo, Xianfeng Yi.4 (667)
- Expression and inhibitors screening of St. Louis encephalitis virus NS2B-NS3 protease Tingting Zhou, Mengru Gao, Mengfan Du, Fan Yu, Lei Feng.4 (677)
- Relationship between soil fungal community and soil environmental factors in degraded alpine grassland..... Haiyun Li, Tuo Yao, Yamin Gao, Jiangui Zhang, Yachun Ma, Xiaowen Lu, Xiaolei Yang, Huirong Zhang, Donghui Xia.4 (688)
- Biochemical characterization of a novel thermostable β -1,4-xylosidase from *Caldicellulosiruptor owensensis* OL Ying Huang, Xueyan Yao, Tengfei Liu, Shuofu Mi, Lichao Sun, Fengjiao Xin.4 (699)
- Influence of dietary fucoidan on inflammatory response and intestinal microbial diversity in weaned pigs Ping Liu, Jinbiao Zhao, Zhengying Geng, Junjun Wang, Ling Liu, Chunlin Wang, Pingting Guo, Yi Wu, Gang Zhang, Bingbing Huang.4 (710)
- Immunogenicity comparison of three multi-epitope proteins expressed in *Escherichia coli* against swine foot-and-mouth disease virus serotype A..... Yimei Cao, Xingkai Wang, Sheng Wang, Kun Li, Yuanfang Fu, Dong Li, Zengjun Lu, Zaixin Liu.4 (718)

- Decolorization of methanil yellow G by a halophilic bacterial consortium.....
 Jing Xie, Guang Guo, Fang Tian, Siyi Zhou, Keqiang Ding, Feng Yang, Wang Zhou, Chong Liu.4 (729)
- Cellulase activities and expression regulation by multiple targeted silencing carbon catabolic repressors in *Trichoderma reesei*..... Jiawen Deng, Yunyu Gao, Xukun Liu, Keke Zhang, Luyao Zhong, Shengli Tian.4 (743)
- Complete genome sequence of *Marinomonas* sp. FW-1, an arylsulfataseproducing bacterium isolated from red seaweed
 Qiang Wang, Xiaoting Fu, Xiangzhao Mao, Jiachao Xu, Xin Gao.4 (744)
- Secondary metabolites of an endophytic fungus *Diaporthe* sp. derived from *Blumea balsamifera* (L.) DC.
 Chao Yuan, Gang Li, Yingbo Zhang, Yuxin Pang.4 (761)
- Enhancing antifungal activity of chitinase by fusion of chitin binding domain at both termini.....
 Tianyan Gu, Xiaonan Liu, Lingcong Li, Yanchi Liu, Shaofeng Hu, Chenyin Lv, Hua Liu, Guogang Zhao.4 (770)
- ToxS homodimerization enhances ToxR activating virulence gene expression in *Vibrio cholera*
 Xianghong Wang, Ting Zhang, Fei Tu, Mengting Shi, Hui Wang, Menghua Yang.5 (840)
- Isolation and identification of a tickborne salt and alkali tolerant bacterium *Oceanobacillus oncorhynchi* IMH ...
 Chaomulige, Eerdunbaoligao, Tianpeng Huang, Mi Wu, Haiyan He, Feng Jin, Geriletu.5 (850)
- The transcriptional regulator SpfB negatively regulates DNA phosphorothioate modification in *Pseudomonas fluorescens* Pf0-1 Yuping Wang, Lingxin Kong, Tao Zheng, Jinli Li, Yihua Sun, Delin You.5 (851)
- Involvement of *HOG1* MAPK in the regulation of sodium arsenite-induced apoptosis in yeast cells
 Lihua Wu, Yanfei Chen, Huilan Yi.5 (870)
- Exploration of functional genes related to iron carrier secretion in the plant growth-promoting rhizobacteria *Bacillus mycoides* Gnyt1..... Xiaomei Yang, Jianhong Li, Tuo Yao, Qi Li, Ying Feng.5 (880)
- Effect of feed on gut bacterial diversity and larval survival of *Ectropis oblique* (Lepidoptera: Geometridae).....
 Yong Zhang, Tianyu Zhao, Jundan Deng, Zhenzhen Wu, Yunqiu Yang, Yanhua Long.5 (890)
- RNA-Seq reveals changes of gene expression and cellular metabolism caused by exogenous oxidative stress (H₂O₂)
 in *Foc4*..... Xingzhu Qi, Lei Liu, Jun Wang.5 (906)
- Construction of type A foot-and-mouth disease marker virus with deletion of 104–115 amino acids of 3A protein
 Pinghua Li, Xueqing Ma, Hong Yuan, Ziwen Yuan, Pu Sun, Xingwen Bai, Zengjun Lu, Zaixin Liu.5 (915)
- Selective degradation of coexisting phenanthrene and anthracene by *Irpex lacteus* F17 Jun Liu, Juan Wu.5 (925)
- Selection and characterization of intestinal *Bacillus* strain antagonistic against pathogenic *Streptococcus agalactiae*
 of tilapia
 ... Yanxia Gao, Defeng Zhang, Xiaoli Ke, Zhigang Liu, Mengmeng Yi, Miao Wang, Xueqing Han, Maixin Lu.5 (938)
- Construction of a novel plasmid system for epitope tagging and gene deletion in *Saccharomyces cerevisiae*.....
 Shiwei Tang, Hui Li, Siwon Choi, Zhengtan Zhang, Zhiping Xie.5 (949)
- Biocontrol of green mold decay in Jincheng citrus fruits by *Pseudomonas fluorescens* ZX
 Zhirong Wang, Xiaofei Mei,
 Muying Du, Mengyao Jiang, Hongxin Zhang, Kaituo Wang, Zsolt Zalán, Ferenc Hegyi, Jianquan Kan.5 (964)

- Identification of conidial pigment synthetic gene *pksI* and its effect on development and pathogenicity in *Aspergillus flavus* Penglin Wei, Peng Zhang, Wei Li, Shihua Wang, Wen-Bing Yin.5 (977)
- Optimization of cadmium adsorption conditions and anti-stress characteristics of a cadmium-tolerant *Bacillus methylotrophicus* strain Dongxue Zhang, Yaxiong Wen, Zhiwei Luo, Xueling Li, Shuangfeng Zheng, Shiyong Tan.7 (1265)
- Duplex PCR assay for detection of coral pathogenic strains XSBZ03 and XSBZ14 Siyue Yang, Yanan Fu, Hao Long, Xiang Zhang, Zhenyu Xie.7 (1274)
- Gene *Hsc70-4* promotes the replication and proliferation of *Bombyx mori* nucleopolyhedrovirus Peng Chen, Xiyao Bao, Zhanqi Dong, Taotao Kang, Yan Zhu, Minhui Pan, Cheng Lu.7 (1284)
- Effect of amino acid mutation(s) in the G-H loop of VP3 on biological characteristics of foot-and-mouth disease virus serotype O Dongdong Chen, Xingwen Bai, Xiaohua Gong, Huifang Bao, Pinghua Li, Dong Li, Yuanfang Fu, Qifeng Bai, Hong Yuan, Pu Sun, Xueqing Ma, Yimei Cao, Yingli Chen, Zengjun Lu, Zaixin Liu.7 (1294)
- Dissimilatory iron reducing microorganisms in South Mid-Atlantic Ridge hydrothermal fields and their mineralized products Guangyu Li, Xiang Zeng, Zongze Shao.7 (1306)
- Isolation, identification and effect of heavy metals on the growth of *Cylindrospermopsis raciborskii* helix from shrimp ponds Lihua Nie, Dongjuan Yang, Yaqun Liu, Boping Han, Xiulan Ma, Guangcai Zha.7 (1317)
- SUMO-Fused expression and characterization of Heparinase I from *Bacteroides thetaiotaomicron* Chuan Zhang, Yue Zhang, Xiaohu Ding, Zhongyuan Li, Yajian Song, Xuegang Luo.7 (1330)
- Isolation, identification and prey range of *Halobacteriovorax* sp. BALOs10 Xiaosheng Ye, He Zhao, Mingxia Chen, Heyang Li, Xiaoyu He.7 (1341)
- Gene expression profiling of *Dunaliella salina* under different salinity stress Xiaochai Zhang, Liang Li, Ningfang He, Xueqing Gong, Pengyue Zhu, Xiaoyang Wang.7 (1353)
- Cloning, overexpression and characterization of isomaltases IMA1 from different strains of *Saccharomyces cerevisiae* Jinqian Ye, Yongshan Zhao, Yuguang Du, Jianjun Li.7 (1354)
- Effects of banana pseudostem biochar on bacterial abundance and community structure in rhizosphere soil Mingyuan Wang, Shizhen Hou, Tao Dong, Minyu Zhang, Jianfu Liu, Zhizhou Xu.7 (1372)
- Isolation and identification of soil *Bacillus* strains that encode aconitate isomerase Cao Zheng, Lu Cai, Zhongqiang Zhang, Lihua Wang, Yujun Dai, Cuiying Du.7 (1382)
- Screening of genes induced by exogenous phenolic on mycorrhized *Poncirus trifoliata* Mingyuan Wang, Jianfu Li, Jianfu Liu, Zhizhou Xu, Ping Lin, Yuqing Li.7 (1394)
- Identification and characterization of a novel sporulation-related protein Srp1 in *Cryptococcus neoformans* Chengli Fan.7 (1407)
- Inhibition of BmNPV proliferation by *Bombyx mori* ADP/ATP transportase (BmANT) Zhanqi Dong, Yaming Jiang, Peng Chen, Minhui Pan.8 (1483)
- Rhizosphere microbial community structure and function of *Zostera japonica* in the distribution area of seagrass beds in the Yellow Sea and Bohai Sea Pengyuan Liu, Haikun Zhang, Lin Chen, Yanyu Sun, Caixia Wang, Hong Song, Xiaoke Hu.8 (1499)

- Characterization of diguanylate cyclase metabolism-related gene in *Azorhizobium caulinodans* ORS571 Xuezhi Yang, Rimin Shen, Yu Sun, Runzhi Li, Zhihong Xie.8 (1511)
- Sterilization by dielectric barrier discharge low temperature plasma under different treatment conditions Liangjun Ma, Jiamei Wang, Mingming Huang, Jianhao Zhang, Wenjing Yan.8 (1521)
- Structure and composition variation of the root-microbiota of *Rhododendron delavayi*..... Min Fang, Xiaorong Xu, Ming Tang, Jing Tang.8 (1534)
- Effect of cavity-filling mutations on thermostability of lipase LipA from *Burkholderia* sp. Yanru Liu, Xin Li, Panpan Dong, Jianzhong Huang, Zhengyu Shu.8 (1546)
- Deletion of *PigE*, a pigment biosynthesis-related gene, upregulates the varieties and yields of yellow pigments in *Monascus purpureus* Mp-21 Jiaqi Wang, Qi Zhang, Bei Jiang, Mengxia Lv, Donghua Jiang.8 (1547)
- Expression and characterization of β -galactosidase from fecal microbes of *Rhinopithecus bieti* Wenhong Zhang, Yanxia Yang, Zhengfeng Yang, Zunxi Huang, Junjun Li, Xianghua Tang, Yunjuan Yang, Qian Wu, Yuelin Mu, Nanyu Han, Bo Xu.8 (1575)
- Diversity and community structure of ammonia oxidizing archaea in rhizosphere soil of reed in Ebinur Lake Wetland Shuaibing He, Wenge Hu, Xitong Jin, Tingting Zhou, Zhentao Zhong, Yuee Wang.8 (1585)
- Gene transcriptional pattern, prokaryotic expression and functional analysis of an apoplastic, hydrophobic and small effector SCR82 from *Phytophthora capsici* Zihui Zhang, Shenxin Huang, Hang Tao, Ye Zhang, Yao Zhao, Zhaolin Ji, Xiaoren Chen.8 (1599)
- Diversity of soil nitrogen-fixing microorganisms in *Salicornia europaea* community of Ebinur Lake wetland during different periods Xitong Jin, Wenge Hu, Shuaibing He, Tingting Zhou, Yuee Wang, Zhentao Zhong.8 (1611)
- Construction of HlyA and HasA exocrine expression systems in *Yersinia pestis* Chenyan Huang, Ruping Zheng, Zhongxiu Li, Yunqin Yu, Yuqi Luo, Jianshuang Zhou, Feiping Zhang, Songqing Wu.8 (1623)
- The *dlt* operon in *Bacillus thuringiensis* confers resistance to cationic antimicrobial peptides and virulence to insect Huan Wu, Haiwen Wang, Li Zhu, Xuyan Wei, Bing Wang, Chunxu Song, Ziquan Yu.10 (1897)
- Effects of phosphorus, sulfur and carbon dioxide concentrations on growth and carbohydrate accumulation of *Desmodesmus insignis*..... Yi Huang, Baoyan Gao, Feifei Wang, Chenming Dai, Min Su, Chengwu Zhang.10 (1926)
- A new 3-oxoacyl-acyl-carrier-protein reductase identified in *Pseudomonas putida* SJTE-1 can catalyze the transformation of 17 β -estradiol Wanli Peng, Mina Guli, Daning Zheng, Rubing Liang.10 (1927)
- Expression and immunological characterization of the OmpA protein from *Vibrio parahaemolyticus* strain SH112 Yalei Wang, Quan Wang, Xuerui Bai, Chuangnan Bie, Zhaoguo Chen, Xianghan Han, Wei Jiang.10 (1947)
- Application of 16S rRNA high-throughput sequencing for comparative study of the microbial diversity of traditional fermented bactrian camel milk from Alxa Bactrian camel and Sonid bactrian camel..... Na Zhuo, Li Yi, Sina Hao, Tu Jirimu.10 (1959)
- NADH dehydrogenase subunit F is required for cell motility and pathogenicity in *Ralstonia solanacearum* Jianhua Tong, Gibson Kamau Gicharu, Xun Hu, Xiaojing Fan, Tao Zhuo, Huasong Zou.10 (1960)

- Isolation and identification of a *Bacillus velezensis* strain against plant pathogenic *Xanthomonas* spp. Shengzhang Li, Ying Chen, Ruihuan Yang, Cuiping Zhang, Zhao Liu, Yilang Li, Tao Chen, Gongyou Chen, Lifang Zou.10 (1983)
- Bacterial community structure and diversity of rhizosphere soil and stem of healthy and bacterial wilt tobacco plants Ligang Xiang, Hao Zhou, Hancheng Wang, Zhen Li, Qianli Chen, Zhihe Yu.10 (1999)
- Prediction and functional analysis of GGDEF/EAL domain- containing proteins in *Azorhizobium caulinodans* ORS571 Yu Sun, Zhihong Xie, Wei Liu, Hongen Guo.10 (2000)
- Expression, characterization and thermostability improvement of low specificity L-threonine aldolase from *Pseudomonas putida* KT2440 Lihong Li, Rongzhen Zhang, Lixian Zhou, Zhiyong Liu, Kaiang Xuan, Junchao Rao, Yan Xu.10 (2023)
- Isolation and identification of antagonizing and growth- promoting actinobacteria colonized in plant roots and rhizosphere Chuhan Ning, Wenbin Li, Chen Zhang, Runjin Liu.10 (2037)
- Effect of *Pennisetum* sp. and its different growth periods on physical-chemical properties and bacterial diversity in sandstone areas Lan Mei, Zaixing Huang, Zhaozhao Song, Yulei Jia, Dewei Su, Hui Lin, Zhanxi Lin.10 (2050)
- Metabolic engineering of *Starmerella bombicola* for enhanced acid-type sophorolipid production. Jiangrui Zhang, Lihua Zhang, Yibo Shi, Wei Shen, You Fan, Xianzhong Chen.11 (2106)
- Molecular epidemiological characteristics of *Brucella suis* in China. Zhiguo Liu, Miao Wang, Hongyan Zhao, Dongri Piao, Dianying Lu, Zhenjun Li.11 (2116)
- Seagrass-microbial interactions in the rhizosphere. Weiguo Zhou, Dewen Ding, Juan Ling, Xiancheng Lin, Qingsong Yang, Ying Zhang, Manzoor Ahmad, Yanying Zhang, Junde Dong.11 (2129)
- Isolation and identification of an antagonistic endophytic bacterium from mulberry for biocontrol against *Boeremia exigua*. Ruolin Wang, Weifang Xu, Fei Wang, Xiaolei Zhou, Yue Zheng, Hongsen Jiang, Jie Xie.11 (2143)
- β -glucan degrading hydrolases from *Caldicellulosiruptor* sp. F32 and influence of glycosylation on F32EG5 thermostability Jie Feng, Hamed I. Hamouda, Naisr Ali, Yuming Wang, Peiyu Zhang, Ming Lv.11 (2154)
- Breeding of new *Pleurotus ostreatus* strain by mutation with ^{60}Co - γ irradiation Bing Song, Xuefei Li, Zeyu Shi, Changtian Li, Yongping Fu, Yu Li.11 (2164)
- Transcriptome-metabolome analysis of *Trichoderma harzianum* ACCC32524 under NaCl stress. Jie Xiang, Jingshi Chen, Xinxin Xia, Kuai Liu, Shigui Li, Jingang Gu.11 (2181)
- Water quality control in aquaculture system by *Bacillus cereus* S458-1 Wenjin Zhang, Jiaojiao Zhang, Yanhong Li, Yanhong Jiang, Weizhi Yao, Zhengli Wu.11 (2193)
- Antibiotic resistance and antibiotic resistance gene transfer of ESBLs-producing *Escherichia coli* in Naihe, Taian Shoujing Yi, Qingxiao Liu, Zhiyu Jiang, Shuhong Sun.11 (2205)
- Function of uridylyltransferase and uridylyl-removing enzyme GlnD in *Corynebacterium glutamicum* JNR. Jing Li, Meijuan Xu, Qunfeng Shu, Yawen Zhao, Mi Tang, Xian Zhang, Taowei Yang, Zhenghong Xu, Zhiming Rao.11 (2217)
- New constitutive promoters screened from metagenomic library of rumen microbes. Li Wang, Yun Zhao, Qian Yang, Xin Dai, Yaxin Zhu, Zhiyang Dong.11 (2228)
- bkd* gene cluster is regulated by BkdR and CcpA in *Bacillus thuringiensis* Jilong Wen, Qi Peng, Xin Zhao, Jie Zhang, Fuping Song.11 (2239)

- Isolation and identification of some cultivated bacteria from the sea area of Rizhao for screening of agaraseproducing bacteria.....Ang Liu, Shuang Wang, Feng Du, Qingjie Xue, Xiuzhen Li.11 (2250)
- Phylogenetic diversity and plant growthpromoting characteristics of endophytic *Pantoea* spp. in rice seeds Hebao Guo, Shanwen He, Xing Wang, Jun Zhang, Xiaoxia Zhang.12 (2295)
- Deficiency of Coenzyme A disulfide reductase in Methicillin- resistant *Staphylococcus aureus* MRSA252 delays the secondary damage of oxacillin Ping Yang, Qiang Liu, Yu Jiang, Bingbing Sun, Junjie Yang, Qi Li, Sheng Yang, Daijie Chen.12 (2305)
- Impacts of cadmium on the diversity of endophytic bacteria associated with hyperaccumulating and nonhyperaccumulating ecotypes of *Sedum alfredii* Shuhua Zou, Pingxiang Deng, Xinxian Long.12 (2322)
- Regulation of soil microbial community structures and watermelon Fusarium wilt by using bio-organic fertilizer Feiying Zhu, Yi Zhang, Jiling Xiao, Lin Wei, Zhihui Liang.12 (2333)
- Fungal community structure in mining soil and its adsorption kinetics of rare earthheavy metal ions..... Hao Yuan, Menghan Lu, Hongwei Liu, Jumei Liu, SuRiguga Bao, Qian He, Haibo Li, Weiwei Cao, Ji Zhao, Zhihua Bao.12 (2345)
- Comparison of evolutionary relationships between mitochondrial and nuclear DNAs in *Cordyceps militaris* Shu Zhang, Ningbo Cui, Yuxiang Zhao, Yongjie Zhang.12 (2356)
- Key catalytic sites in the reverse transcription domain of L1.LtrBintron encoded protein Xianghao Chen, Zhengrong Zhang, Fang Liu, Zhenghong Chen, Wei Hong, Tingna Qi, Junying Gu, Guzhen Cui.12 (2366)
- Conidial formation and pathogenicity of *Ciboria shiraiana*..... Ruihua Lü, Panpan Zhu, Maode Yu, Changying Liu, Aichun Zhao.12 (2367)
- Characterization of Serine/Threonine Protein Kinases K (PknK) in *Mycobacterium* Yixuan Zhou, Xintong Zhou, Jian Yang, Xinling Hu, Kaixia Mi.12 (2389)
- Characteristic Analysis of Resistance to BmNPV in CVDAR strain of Silkworm Qi Qin, Zhanqi Dong, Xuejiao Lei, Mingya Cao, Liang Tang, Meining Shi, Minhui Pan.12 (2400)
- Fungal composition and diversity of tobacco phyllosphere from cured tobacco leaves..... Qianli Chen, Zhong Li, Hancheng Wang, Yu Huang, Liuti Cai, Honglian Xie, Hao Zhou.12 (2409)
- Rhizosphere microbiome mediated growth-promoting mechanisms of *Bacillus amyloliquefaciens* FH-1 on rice ... Qingqing Li, Song Xu, Wei Zhao, Rong Yang, Siqi Zhao, Zhiyong Huang, Jingjing Wang.12 (2426)
- Isolation and metabolic characters of *Clostridium* strains from pit mud of Luzhou-flavor baijiu Xiuxin Pu, Lijuan Chai, Pengxiang Xu, Xiaojuan Zhang, Zhenming Lu, Songtao Wang, Caihong Shen, Jinsong Shi, Zhenghong Xu.12 (2436)

(The End)