

中文目次

专论

- 2151 ICNP与SeqCode：组学时代原核生物命名面临的机遇与挑战
张道锋, 焦建宇, 李文均

综述

- 2172 不同血清型肉毒毒素受体结合域研究进展
尹凡铭, 朱晨思, 李涛, 王慧
- 2194 细菌纤维素合酶的基本特性及作用机理
张凯仁, 李任杰, 柯晶滢, 李骏卓, 孙世静
- 2209 微生物促进膀胱尿路上皮细胞癌发生和发展分子机制的研究进展
刘振, 张宁南, 杨敏, 柳陈坚, 李晓然
- 2224 儿童肠道菌群与食物过敏关系的研究进展
杨善平, 赵童, 余辉艳, 周催
- 2242 抗菌肽的结构分析、抗菌机制及改造应用的研究进展
杨晨远, 于子川, 秦迪, 高媛媛

研究报告

- 2260 葡萄糖酸促进氧化亚铁硫杆菌磁小体合成的发酵动力学
邢思雨, 英高飞, 李薪同, 张爽, 刘涛, 赵丹, 王伟东, 周宁一, 曼磊
- 2277 靶向 α -酮戊二酸脱氢酶增强纳米银的抗菌作用
何雨婧, 杜华茂
- 2295 博物馆库房环境真菌组成季节性特征研究
唐铭, 杜然, 石安美, 柳敏, 郭金沂, 邵慧琪
- 2307 猪繁殖与呼吸综合征病毒GS15株NSP2蛋白多位点缺失病毒的拯救与体外生长特性分析
张兴民, 张婧, 孙普, 李娇阳, 崔占鼎, 李国秀, 王健, 李平花, 袁红, 李坤, 曹轶梅, 付元芳, 李冬, 赵志荀, 曾巧英, 卢曾军
- 2323 微生物菌剂对绞股蓝药效成分及根际细菌群落的影响
曹麟, 王宇龙, 卜俊文, 宋天骄, 刘玉涛, 韦小敏, 林雁冰
- 2337 铜绿假单胞菌中PA0847二鸟苷酸环化酶活性受非催化位点Y700调控
肖王鑫, 杨婷婷, 黄卫东, 袁文肃, 张燕, 林志
- 2352 利用副干酪乳酪杆菌SCFF20高效生物合成纳米硒颗粒：一种潜在的亚硒酸盐生物转化工厂(英文)
赵志峰, 曹雨澜, 陈晓蝶, 王佐军, 徐腾, 熊大可, 胡陆军
- 2368 鸭疫里默氏杆菌CH-1株37 °C和42 °C的转录组测序及比较分析
汪思懿, 郭方, 程安春, 刘马峰

- 2381 CATH-B1抑制肠外致病性大肠杆菌诱导小胶质细胞炎性反应的作用研究
许雅婷, 潘言迪, 徐刘溢, 方仁东, 江莎, 彭练慈

- 2394 基于RNA-seq分析 $bdhA$ 敲除对枯草芽孢杆菌产纳豆激酶和MK-7的影响
黄茜琳, 黄俊宝, 高旭丽, 罗雅妮, 陶伟, 郭明雨, 刘永圆, 吴晶, 吴超, 薛正莲, 陈宇, 刘艳

- 2407 鸭疫里默氏杆菌九型分泌系统(T9SS)分泌蛋白B739_0093的功能鉴定
江茵, 罗睿心, 程安春, 刘马峰

- 2419 基于NADH焦磷酸酶高效表达的NMNH生物转化合成
李雪媛, 龚劲松, 苏畅, 李恒, 徐国强, 许正宏, 史劲松

- 2434 云南两个花魔芋主产区软腐病害植株腐烂球茎中的菌群组成及特征
张绍智, 田庆红, 董坤, 杨丽萍, 殷减清, 张仲凯

- 2453 基于CRISPR/Cas9构建伪结核棒状杆菌 $cp40$ 敲除株及其生物学特性与致病性研究
吕红, 李鑫灿, 牛禄婷, 王芝英, 周作勇

- 2465 一株对羟基苯甲酸降解菌的降解条件优化及缓解黄瓜根际对羟基苯甲酸胁迫效应
吴佩佩, 袁秀丰, 丰景

- 2479 地衣芽孢杆菌HDTN对817肉鸡生长性能及肠道菌群的影响
丁红霞, 潘朝阳, 孟凡丛, 陈聘聘, 许萍, 王婕, 范鑫, 李世杰, 周祖涛, 石德时, 肖运才

- 2493 口蹄疫O型重组病毒的构建及其免疫原性分析
黄书伦, 查晶晶, 孙普, 章兴赜, 李冬, 曹轶梅, 白兴文, 付元芳, 马雪青, 李坤, 袁红, 卢曾军, 刘在新, 李平花

- 2502 酱香型白酒堆积酒醅中象牙色克罗彭斯特德菌的分离筛选及其代谢特性解析
吴双全, 柴丽娟, 黄廷财, 时伟, 陆震鸣, 张晓娟, 王松涛, 沈才洪, 许正宏

- 2522 不同耕作方式结合秸秆还田对玉米内生细菌多样性的影响
刘雨静, 韩升才, 高聚林, 于晓芳, 青格尔, 胡树平, 郭江岸, 赵晓宇

- 2539 粪便微生物宏基因组来源L-天冬酰胺酶的性质表征及应用研究
梁师思, 夏娆, 高艳, 蒋海波, 张呈波, 黄遵锡, 许波

技术与方法

- 2554 反刍动物瘤胃中主要厌氧真核微生物尖尾内毛虫的体外培养方法
徐勤辉, 何金英, 王宇嘉, 彭成, 鲁小悦, 杨紫贤, 袁发卉, 滑聪杰, 熊杰, 缪炜, 冯金梅

数据论文

- 2566 中国植物丛枝菌根侵染特征研究
马路平, 石兆勇, 张梦歌, 范明莉

CONTENTS

SPECIAL SECTION

- 2151 ICNP and SeqCode: opportunities and challenges of prokaryotic nomenclature in the omics era
ZHANG Daofeng, JIAO Jianyu, LI Wenjun

REVIEWS

- 2172 Research progress in receptor-binding domains of different serotypes of botulinum neurotoxins
YIN Fanming, ZHU Chensi, LI Tao, WANG Hui
- 2194 Basic characteristics and catalysis mechanism of bacterial cellulose synthase
ZHANG Kairen, LI Renjie, KE Jingying, LI Junzhuo, SUN Shijing
- 2209 Progress in the mechanism of microbiota promoting the development and progression of urothelial carcinoma of bladder
LIU Zhen, ZHANG Ningnan, YANG Min, LIU Chenjian, LI Xiaoran
- 2224 Research progress in the relationship between gut microbiota and food allergy in children
YANG Shaping, ZHAO Tong, YU Huiyan, ZHOU Cui
- 2242 Research progress in structures, mechanisms, and modification of antimicrobial peptides
YANG Chenyuan, YU Zichuan, QIN Di, GAO Yuanyuan

RESEARCH ARTICLES

- 2260 Fermentation kinetics of *Acidithiobacillus ferrooxidans* for magnetosome synthesis improved by gluconic acid addition
XING Siyu, YING Gaofei, LI Xintong, ZHANG Shuang, LIU Tao, ZHAO Dan, WANG Weidong, ZHOU Ningyi, YAN Lei
- 2277 Targeting alpha-ketoglutarate dehydrogenase enhances antibacterial activity of silver nanoparticles
HE Yujing, DU Huamao
- 2295 Seasonal variations of environmental fungal community composition in museum storerooms
TANG Ming, DU Ran, SHI Anmei, LIU Min, GUO Jinyi, SHAO Huiqi
- 2307 Rescue and *in vitro* growth characterization of NSP2 multisite-deleted strain of porcine reproductive and respiratory syndrome virus GS15
ZHANG Xingmin, ZHANG Jing, SUN Pu, LI Jiaoyang, CUI Zhanding, LI Guoxiu, WANG Jian, LI Pinghua, YUAN Hong, LI Kun, CAO Yimei, FU Yuanfang, LI Dong, ZHAO Zhixun, ZENG Qiaoying, LU Zengjun
- 2323 Effects of microbial agents on the active constituents and rhizosphere bacterial community of *Gynostemma pentaphyllum*
CAO Lin, WANG Yulong, BU Junwen, SONG Tianjiao, LIU Yutao, WEI Xiaomin, LIN Yanbing
- 2337 The non-catalytic site Y700 regulates diguanylate cyclase activity of PA0847 in *Pseudomonas aeruginosa*
XIAO Wangxin, YANG Tingting, HUANG Weidong, YUAN Wensu, ZHANG Yan, LIN Zhi
- 2352 Efficient biosynthesis of selenium nanoparticles by *Lactocaseibacillus paracasei* SCFF20: a potential cell factory for selenite conversion
ZHAO Zhifeng, CAO Yulan, CHEN Xiaodie, WANG Zuojun, XU Teng, XIONG Dake, HU Lujun
- 2368 Transcriptome sequencing and comparison of *Riemerella anatipestifer* CH-1 at 37 °C and 42 °C
WANG Siyi, GUO Fang, CHENG Anchun, LIU Mafeng
- 2381 CATH-B1 inhibits extraintestinal pathogenic *Escherichia coli*-induced inflammatory response in microglia
XU Yating, PAN Yandi, XU Liuyi, FANG Rendong, JIANG Sha, PENG Lianci
- 2394 RNA-seq reveals the effects of *bdhA* knockout on co-production of nattokinase and menaquinone-7 by *Bacillus subtilis*
HUANG Xilin, HUANG Junbao, GAO Xuli, LUO Yani, TAO Wei, GUO Mingyu, LIU Yongyuan, WU Jing, WU Chao, XUE Zhenglian, CHEN Yu, LIU Yan
- 2407 Roles of B739_0093 as a protein secreted by type IX secretion system (T9SS) in *Riemerella anatipestifer*
JIANG Yin, LUO Ruixin, CHENG Anchun, LIU Mafeng
- 2419 Efficient expression of NADH pyrophosphatase promotes the synthesis of NMNH by biotransformation
LI Xueyuan, GONG Jinsong, SU Chang, LI Heng, XU Guoqiang, XU Zhenghong, SHI Jinsong
- 2434 Composition and characteristics of microflora in the corm of *Amorphophallus konjac* K. Koch infected by soft rot in two main konjac production areas in Yunnan
ZHANG Shaozhi, TIAN Qinghong, DONG Kun, YANG Liping, YIN Jianqing, ZHANG Zhongkai
- 2453 Biological characteristics and pathogenicity of *Corynebacterium pseudotuberculosis* cp40-deleted strains constructed by CRISPR/Cas9
LÜ Hong, LI Xincan, NIU Luting, WANG Zhiying, ZHOU Zuoyong
- 2465 Optimization of degradation conditions and mitigation the stress effect of p-hydroxybenzoic acid in cucumber rhizosphere by a strain of p-hydroxybenzoic acid degrading bacteria
WU Peipei, YUAN Xiufeng, FENG Jing
- 2479 Effects of *Bacillus licheniformis* HDTN on growth performance and intestinal flora of '817' broilers
DING Hongxia, PAN Chaoyang, MENG Fancong, CHEN Pinpin, XU Ping, WANG Jie, FAN Xin, LI Shijie, ZHOU Zutao, SHI Deshi, XIAO Yuncai
- 2493 Construction and immunogenicity of serotype O recombinant foot-and-mouth disease virus
HUANG Shulun, ZHA Jingjing, SUN Pu, ZHANG Xingze, LI Dong, CAO Yimei, BAI Xingwen, FU Yuanfang, MA Xueqing, LI Kun, YUAN Hong, LU Zengjun, LIU Zaixin, LI Pinghua
- 2502 Isolation, screening, and metabolic characterization of *Kroppenstedtia eburnea* from the fermented grains of Jiang-flavor Baijiu
WU Shuangquan, CHAI Lijuan, HUANG Tingcai, SHI Wei, LU Zhenming, ZHANG Xiaojuan, WANG Songtao, SHEN Caihong, XU Zhenghong
- 2522 Effects of different patterns of tillage combined with straw returning on endophytic bacterial diversity in maize
LIU Yujing, HAN Shengcai, GAO Julin, YU Xiaofang, QING Ge'er, HU Shuping, GUO Jiang'an, ZHAO Xiaoyu
- 2539 Characterization and application of an L-asparaginase derived from the metagenome of fecal microbiota
LIANG Shisi, XIA Rao, GAO Yan, JIANG Haibo, ZHANG Chengbo, HUANG Zunxi, XU Bo

TECHNOLOGY AND METHOD

- 2554 An *in vitro* cultivation method for the predominant anaerobic eukaryotic microorganism *Entodinium caudatum* in the rumen of ruminants
XU Qinhuai, HE Jinying, WANG Yujia, PENG Cheng, LU Xiaoyue, YANG Zixian, YUAN Fahu, HUA Congjie, XIONG Jie, MIAO Wei, FENG Jinmei

DATA PAPER

- 2566 Colonization characteristics of arbuscular mycorrhizal fungi in plants distributed in China
MA Luping, SHI Zhaoyong, ZHANG Mengge, YUAN Mingli