

目 次

手足口病相关肠道病毒研究专题

论著

贵州省南部地区 2019-2024 年手足口病病原谱构成及流行特征的研究 苏飞, 郭军, 张富敏, 王寅寅, 唐小敏 (1353)

短篇论著

聚集性发热疫情相关的柯萨奇病毒 A 组 4 型 VP1 区基因特征分析 尉秀霞, 肖金波, 李敏, 王祎, 杨艳娜, 吕若然, 张勇 (1361)

呼吸道病毒研究专题论著

北京市丰台区人偏肺病毒聚集性发热疫情的基因特征分析 秦萌, 颜涛, 王超, 侯宛祺, 刘春源, 张代涛, 张彦 (1367)

人类病毒研究论著

朊病毒感染的细胞及小鼠模型中 SUMO1 修饰的变化及与朊蛋白相互作用的研究

..... 李纯洁, 张卫卫, 高利萍, 王远, 梁冬林, 肖康, 陈操, 董小平, 石琦 (1376)

2023 年广州市荔湾区诺如病毒胃肠炎疫情毒株遗传变异特征分析 肖颖, 李利利, 谭志熹, 刘远, 李金松, 段招军 (1385)

复制型慢病毒检测用 HIV 弱毒株的构建及生物学特性研究 房恩岳, 常宇桐, 何畦嘉, 胡孔新 (1393)

基于甲病毒病毒样颗粒的 mRNA 递送技术研究 王鑫, 罗鑫, 潘晓玲, 叶湘漓, 李晓丹 (1403)

荆门蜱虫病毒 S3 片段非编码区对转录调控和蛋白翻译的影响 冯秀伟, 冯硕, 郭亚青, 李欣蓓, 徐昊, 牛国宇, 朱禹静 (1415)

病原微生物实验室人员培训系统的构建与应用

..... 吕涵潇, 董捷, 史海月, 张曙霞, 甄维, 周为民, 李杰, 王涛, 赵丰泽宽, 仲松超, 王衍海 (1425)

短篇论著

2019-2024 年济南市儿童呼吸道合胞病毒感染的分子流行病学特征分析 孙嘉文, 亓娜, 赵宝添, 丁小满, 刘辉, 吕燕 (1431)

甲状腺癌与 EBV 感染及 ERK 信号通路相关性研究 王秋红, 叶本新, 赵光辉, 徐昌斌, 翟振 (1439)

EB 病毒感染与溃疡性结肠炎患者血清指标及病情关系 丁小莹, 董志超, 毛建娜 (1445)

病毒性丙型肝炎筛查中丙型肝炎病毒高敏核酸检测及抗体检测的价值研究 青清, 何丽华, 邓蓉, 秦榕蔚 (1451)

巨细胞病毒感染对机体氨基酸代谢的影响及与肝炎综合征的相关性分析 陈凯权, 郭致伟, 马进 (1458)

巨细胞病毒与冠状动脉损伤的关系研究 孙建锋, 崔永攀, 刘艳芳 (1464)

猫杯状病毒非结构蛋白 NS2 与宿主细胞互作蛋白的筛选与鉴定

..... 陈尚琛, 董宁宁, 高嘉溪, 谈晓梅, 李娜, 罗茂青, 王诗诗, 朱雯琪, 邓应坤, 庞帅赛, 刘光清, 孟春春 (1470)

动物病毒研究论著

马尔堡病毒核酸 RT-RAA-CRISPR/Cas12a 检测方法的建立 牛莉娟, 张宇欣, 张子莫, 曹增国, 黄培, 张海丽, 王化磊 (1478)

基于 5'UTR 基因的牛肠道病毒 TaqMan 探针实时荧光定量 PCR 检测方法的建立

..... 陆泳锟, 张德雄, 王晓虎, 陈晶, 黄元, 马惠海, 李学泓, 陈翔宇, 黄淑坚, 王刚 (1488)

山西1株A群G9P[23]型猪轮状病毒SX2024的分离鉴定、全基因组特征与乳鼠致病性分析

倪书婷,吴琼,杨克礼,田永祥,李畅,郭锐,朱佳佳,高婷,刘威,袁芳艳,刘泽文,杨玉莹,周丹娜(1499)

Nanopore测序辅助诊断牦牛死亡病例揭示BVDV等多病原混合感染

马筱芮,林元清,阙威,易乐,黎杨,李秀英,李雪梅,郑思思,魏梦君,柴晖丽,王金黎,多杰扎西,涂长春,朱国强,何彪(1511)

国标中H5亚型高致病性禽流感病毒实时荧光RT-PCR方法的优化与应用

刘朔,彭程,毛秋艳,杨吉喆,蒋文明,刘华雷(1522)

2020-2024年贵州省J亚群禽白血病病毒分离鉴定和囊膜基因遗传进化分析

杨洪兴,温贵兰,杨颖,徐飞,王怡然,熊倩,陆小玉,王鹏程,梁康丽,何琴,苏芝乾,李波,邓乔木(1531)

PRRSV类NADC30毒株分离鉴定及Marc-145细胞适应性分子特征分析

周昊然,苏潼键,张路捷,孙杨杨,孙海凤,费中杰,白娟,姜平(1543)

人类病毒综述

呼吸道合胞病毒逃逸宿主抗病毒天然免疫的研究进展 黎婷,朱惠芳(1554)

熔解曲线技术在呼吸道病原体快速检测的研究进展 郑金凤,韩桃利,陈显达,赵剑虹(1565)

甲型流感病毒诱发的肺损伤致病机制及预防措施研究进展 程丹,杜永丽,罗好菲,修鹏(1573)

人腺病毒中和抗体研究进展 颜可昕,王佳楠,杨乐涵,王美琳,刘哲辰,邱红玲(1581)

乙型肝炎病毒孕妇母婴阻断抗病毒治疗及护理研究现状 杨倩,赵倩,王莹莹,彭永海(1594)

血清炎症因子及免疫功能指标在慢性乙型肝炎病毒感染中的应用进展

肖荣,肖丽萍,王美华,黄梦娜,刘萍萍,曾庆芳,付丹(1600)

亨尼帕病毒研究进展 姜佳雨,李忠原,范灵渊,廉翔宇,刘春晖,张成成,陈成龙,吴科锐,杜瑞坤,崔清华(1609)

中国女性高危型HPV感染自然史的系统综述及Meta分析 匡雪凤,贾鑫华,王哲,孙榕静,吴婷,赵方辉,乔友林(1619)

EBV感染对宿主免疫应答及免疫逃避的研究进展

郑海涛,丁樱,任献青,胡晓娜,赵倩义,李向峰,孙晓旭,张慧娟,刘玲玲,张晓,闫永彬(1633)

宿主因子调控HSV-1复制的研究进展 吕雯雯,周磊,吴嘉,孙乐,钱雯,程继帅,段永忠(1642)

m⁵C修饰对RNA功能及病毒感染调节作用的研究进展 尤婉玲,耿澳华,胡婧,付亚男,陈红英,刘龙(1656)

基质辅助激光解吸电离飞行时间质谱(MALDI-TOF MS)在病毒鉴定与分型中的应用 王瑞雪,邹粤,裴晓方,陈嘉熠(1664)

噬菌体免疫沉淀测序在人感染病毒抗体谱中的应用进展 张源源,王延群(1672)

高等级生物安全实验室内高致病性病毒交叉污染的探讨 赵焱(1680)

动物病毒综述

南非2型口蹄疫流行动态与传入风险分析

张津铭,马维民,丁耀忠,吕律,张向乐,刘永杰,杨亚民,杨帆,郭建宏,朱紫祥,刘湘涛,郑海学,何继军(1685)

信 息

《病毒学报》获得中国精品科技期刊顶尖学术论文(F5000)项目来源期刊证书(2017-2020年)(封二)

《病毒学报》获得中国精品科技期刊证书(2008年)(封三)

《病毒学报》入编北大核心《中文核心期刊要目总览》2023年版(第10版)之基础医学类核心期刊(插页)

《病毒学报》获得中国科技核心期刊收录证书(2024年)(插页)

《病毒学报》获得 RCCSE 中国核心学术期刊(A)证书(2023年)(插页)

《病毒学报》获得中国科学引文数据(CSCD)核心来源期刊证书(2025-2026年)(插页)

《病毒学报》入选《中国学术期刊影响因子年报》统计刊源证书(2024版)(插页)

《病毒学报》中国学术期刊影响因子年报(自然科学与工程技术 2024 版)(插页)

2025 年中国微生物学会及各专业委员会学术活动计划表(插页)

《病毒学报》征稿简则(2018 年 12 月 25 日修订)(插页)

《病毒学报》第七届编辑委员会成员名单(插页)

期刊基本参数:CN-11-1865/R * 1985 * b * A4 * 338 * zh * P * 128 * 38 * 2025-09

责任编辑:蒋涛 胡大伟 编辑:魏岚 郭建强 助理执行编辑:张良一

专业英文审校:张智清 出版英文审校:魏岚

手足口病相关肠道病毒专题特邀策划人:张勇 专题处理编辑:蒋涛

CONTENTS

Research on Enteroviruses Associated with Hand, Foot, and Mouth Disease

Article

- Pathogen Spectrum and Epidemiological Characteristics of Hand, Foot, and Mouth Disease in Southern Guizhou Province, China from 2019 to 2024 *SU Fei, GE Jun, ZHANG Fumin, WANG Yinyin, TANG Xiaomin* (1360)

Brief Article

- Genetic Characteristics of Coxsackievirus A4 Associated with an Epidemic of Cluster Fever *WEI Xiuxia, XIAO Jinbo, LI Min, WANG Yi, YANG Yanna, LYU Ruoran, ZHANG Yong* (1366)

Respiratory Virus Article

- Genetic Characterization of Human Metapneumovirus in Clustered Fever Outbreaks in Fengtai District, Beijing, China *QIN Meng, YAN Tao, WANG Chao, HOU Wanqi, LIU Chunyuan, ZHANG Daitao, ZHANG Yan* (1375)

Human Virus Article

- Changes in SUMO1 Modification and Interaction with Prion Proteins in Prion-Infected Cells and Mouse Models *LI Chunjie, ZHANG Weiwei, GAO Liping, WANG Yuan, LIANG Donglin, XIAO Kang, CHEN Cao, DONG Xiaoping, SHI Qi* (1384)

Construction and Biological Characterization of Attenuated HIV Strains for Replication-Competent Lentivirus Detection

- *FANG Enyue, CHANG Yutong, He Qijia, HU Kongxin* (1402)

A Novel mRNA Delivery System Utilizing Alphavirus Virus-Like Particles

- *WANG Xin, LUO Xin, PAN Xiaoling, YE Xiangli, LI Xiaodan* (1414)

Regulatory Effects of the Untranslated Regions of the Jingmen Tick Virus S3 Segment on Transcription and Translation

- *FENG Xiuwei, FENG Shuo, GUO Yaqing, LI Xinbei, XU Hao, NIU Guoyu, ZHU Yujing* (1424)

Establishment and Application of a Training System for Personnel in Pathogenic Microorganism Laboratories

- *LYU Hanxiao, DONG Jie, SHI Haiyue, ZHANG Shuxia, ZHEN Wei, ZHOU Weimin, LI Jie, WANG Tao, ZHAO Fengzekuan, ZHONG Songchao, WANG Yanhai* (1430)

Brief Article

Molecular Epidemiology of Respiratory Syncytial Virus Infection Among Children in Jinan, China, 2019-2024

- *SUN Jiawen, QI Na, ZHAO Baotian, DING Xiaoman, LIU Hui, LYU Yan* (1438)

Study on the Correlation between Thyroid Cancer and EBV Infection as well as ERK Signaling Pathway

- *WANG QiuHong, YE Benxin, ZHAO Guanghui, XU Changbin, ZHAI Zhen* (1444)

Association of Epstein-Barr Virus Infection with Serum Zonulin, Interleukin-22 Levels, and Disease Severity in Patients with Ulcerative Colitis *DING Xiaoying, DONG Zhichao, MAO Jianna* (1450)

Research on the Value of High-Sensitivity Nucleic Acid Testing and Antibody Testing for Hepatitis C Virus in Viral Hepatitis C Screening *QING Qing, HE Lihua, DENG Rong, QIN Rongwei* (1457)

Effect of Cytomegalovirus Infection on Amino Acid Metabolism and Correlation Analysis with Hepatitis Syndrome *CHEN Kaiquan, GUO Ziwei, MA Jin* (1463)

Research on the Relationship between Cytomegalovirus and Coronary Artery Injury *SUN Jianfeng, CUI Yongpan, LIU Yanfang* (1469)

Screening and Identification of Host Proteins Interacting with the Non-structural Protein NS2 of Feline Calicivirus *CHEN Shangchen, DONG Ningning, GAO Jiaxi, TAN Xiaomei, LI Na, LUO Maoqing, WANG Shishi, ZHU Wengi, DENG Yingkun, PANG Shuaishai, LIU Guangqing, MENG Chunchun* (1477)

Animal Virus Article

Establishment of RT-RAA-CRISPR/Cas12a Detection Assay for Marburg Virus Nucleic Acid *NIU Lijuan, ZHANG Yuxin, ZHANG Zimo, CAO Zengguo, HUANG Pei, ZHANG Haili, WANG Hualei* (1487)

Development of a TaqMan ProbeBased Real-Time Quantitative PCR Assay for the Detection of Bovine Enterovirus Targeting the 5'UTR Gene *LU Yongkun, ZHANG Dexiong, WANG Xiaohu, CHEN Jing, HUANG Yuan, MA Huihai, LI Xuehong, CHEN Xiangyu, HUANG Shujian, WANG Gang* (1498)

Isolation, Identification, Whole Genome Characterization, and Pathogenicity Analysis in Neonatal Mice of a Group A G9P[23] Porcine Rotavirus Strain SX2024 from Shanxi Province, China *NI Shuting, WU Qiong, YANG Keli, TIAN Yongxiang, LI Chang, GUO Rui, ZHU Jiajia, GAO Ting, LIU Wei, YUAN Fangyan, LIU Zewen, YANG Yuying, ZHOU Danna* (1510)

Nanopore Sequencing-Assisted Diagnosis of Yak Mortality Reveals Co-infection with BVDV and Other Pathogens *MA Xiaorui, LIN Yuanqing, KAN Wei, YI Le, LI Yang, LI Xiuying, LI Xuemei, ZHENG Sisi, WEI Mengjun, CHAI Huili, WANG Jinli, DUOJIE Zhaxi, TU Changchun, ZHU Guoqiang, HE Biao* (1521)

Optimization and Application of National Standard Based Real-time RT-PCR Method for Detecting Highly Pathogenic H5 Subtype Avian Influenza Virus *LIU Shuo, PENG Cheng, MAO Qiuyan, YANG Jizhe, JIANG Wenming, LIU Hualei* (1530)

Isolation, Identification, and Genetic Evolutionary Analysis of the Envelope Gene of Subgroup J Avian Leukosis Virus in Guizhou Province, China, 2020-2024 *YANG Hongxing, WEN Guilan, YANG Ying, XU Fei, WANG Yiran, XIONG Qian, LU Xiaoyu, WANG Pengcheng, LIANG Kangli, HE Qing, SU Zhiqian, LI Bo, DENG Qiaomu* (1542)

Isolation and Identification of PRRSV NADC30-like Strains and Molecular Characterization in Adaptation of Marc-145 Cell *ZHOU Haoran, SU Tongjian, ZHANG Lujie, SUN Yangyang, SUN Haifeng, FEI Zhongjie, BAI Juan, JIANG Ping* (1553)

Human Virus Review

Research Progress of Respiratory Syncytial Virus Evasion of Host Antiviral Innate Immunity *LI Ting, ZHU Huifang* (1564)

Research Progress on Melting Curve Analysis in the Rapid Detection of Respiratory Pathogens

.....ZHENG Jinfeng, HAN Taoli, CHEN Yuda, ZHAO Jianhong (1572)

Research Progress on the Pathogenesis and Prevention of Lung Injury Induced by Influenza A Virus

.....SHUI Dan, DU Yongli, LUO Yufei, XIU Peng (1580)

Research Progress on Neutralizing Antibodies of Human Adenovirus

.....YAN Kexin, WANG Jianan, YANG Lehan, WANG Meilin, LIU Zhechen, QIU Hongling (1593)

Research Progress on Antiviral Therapy and Nursing Strategies for the Prevention of Mother-to-Child Transmission of Hepatitis B Virus During PregnancyYANG Qian, ZHAO Qian, WANG Yingying, PENG Yonghai (1599)

Progress on the Application of Serum Inflammatory Markers and Immune Function Indicators in Chronic Hepatitis B Virus Infection

.....XIAO Rong, XIAO Liping, WANG Meihua, HUANG Mengshan, LIU Pingping, ZENG Qingfang, FU Dan (1608)

Research Progress on Henipavirus

.....JIANG Jiayu, LI Zhongyuan, FAN Lingyuan, LIAN Xiangyu, LIU Chunhui, ZHANG Chengcheng, CHEN Chenglong, WU Kerui, DU Ruikun, CUI Qinghua (1618)

Natural History of High-risk HPV Infection in Chinese Women: A Systematic Review and meta-analysis

.....KUANG Xuefeng, JIA Xinhua, WANG Zhe, SUN Rongjing, WU Ting, ZHAO Fanghui, QIAO Youlin (1632)

Research Progress on the Effects of EBV Infection on Host Immune Response and Immune Evasion

.....ZHENG Haitao, DING Ying, REN Xianqing, HU Xiaona, ZHAO Qianyi, LI Xiangfeng, SUN Xiaoxu, ZHANG Huijuan, LIU Lingling, ZHANG Xiao, YAN Yongbin (1641)

Research Progress on the Regulation of HSV-1 Replication by Host Factors

.....LYU Wenwen, ZHOU Lei, WU Jia, SUN Le, QIAN Wen, CHENG Jishuai, DUAN Yongzhong (1655)

Advances in the Role of m⁵C Modification in Regulating RNA Function and Viral Infection

.....YOU Wanling, GENG Aohua, HU Jing, FU Ya'nan, CHEN Hongying, LIU Long (1663)

Research Progress of Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry (MALDI-TOF MS) in Virus Identification and TypingWANG Ruixue, ZOU Yue, PEI Xiaofang, CHEN Jiayi (1671)

Advances in Antibody Profiling of Human Viral Infections Using the PhIP-Seq PlatformZHANG Yuanyuan, WANG Yanqun (1679)

Discussion on Cross Contamination of Highly Pathogenic Viruses in High Containment LaboratoriesZHAO Yan (1684)

Animal Virus Review

Epidemiological Dynamics and Incoming Risk Analysis of SAT 2 Foot-and-mouth Disease

.....ZHANG Jinming, MA Weimin, DING Yaozhong, LYU Lyu, ZHANG Xiang, LIU Yongjie, YANG Yamin, YANG Fan, GUO Jianhong, ZHU Zixiang, LIU Xiangtao, ZHENG Haixue, HE Jijun (1690)

Managing Editor:JIANG Tao, HU Dawei, WEI Lan, ZHANG Liangyi

Professional English Reviewer:ZHANG Zhiqing **Publishing English Reviewer:**WEI Lan

Guest Editor of "Research on Enteroviruses Associated with Hand, Foot, and Mouth Disease": ZHANG Yong

Managing Editor: JIANG Tao