

发展战略

- 基于月球科研站的科研活动战略分析及其作业平台总体方案研究 裴照宇, 王琼, 徐琳, 张晨轩, 张锋, 张贤国, 王汇娟, 贾瑛卓, 刘洋, 薛长斌, 张金海, 张天馨, 彭兢, 王赤, 邹永廖 (1)
- NASA 月球到火星战略架构的解析 夏一峰, 高玉月, 周诚 (15)

研究论文

综述

- 微重力环境下超冷原子物理研究 李琳, 汪斌, 周小计, 陈徐宗, 李唐, 刘亮 (29)

空间物理

- 波模合并激发谐波脉泽辐射的泵波模拟 刘功林, 宁昊, 倪素兰, 李传洋, 张子龙, 李耀坤, 陈耀 (56)
- 基于一维残差卷积神经网络的 Pi_2 脉动识别模型 张怡悦, 邹自明, 方少峰 (66)
- 全日面机器学习耀斑业务预报 李铭, 崔延美, 罗冰显 (82)
- 利用深度学习实现 Dst 指数短期业务预报 牛犇, 黄智 (91)
- 激光雷达观测研究低纬度地区钠层季节变化特征 何诗敏, 张铁民, 柴薇薇, 张一民, 羊大立, 彭鸿雁, 王继红 (102)
- 基于风云三号 E 星探测的黄昏时热层大气成分比值季节转换研究 石正, 付利平, 江芳, 毛田 (113)
- 基于艇载太赫兹辐射计的大气温度廓线反演 朱家玮, 周晨, 赵正予, 刘祎 (125)
- 近红外波段大气偏振态研究及实验验证 陈智兴, 勾万祥, 佟帅, 张梦瑶, 李崇辉 (135)

微重力与空间生命科学

- 旋转作用下水平圆管内蒸汽冷凝特性 张雷刚, 茹梦, 李豪, 岳利文, 陈振乾, 马艳阳 (149)
- 辐射与模拟失重对大鼠脑电信号的影响规律及损伤机制 丰俊东, 田刘欣, 李骞, 赵锡达, 杨颖清, 王维泰 (162)

空间探测技术

- 激光频率波动对空间引力波探测激光干涉测量的影响分析 刘宇, 张玉珠, 彭晓东, 赵梦园, 杨震, 唐文林, 强丽娥 (179)
- 面向空间引力波探测检验质量捕获的弹性管模型预测控制 贺雄峰, 卢苇, 许诺, 王鹏程, 张永合, 崔冰, 夏元清 (189)
- 一种磁异常梯度测量的地磁/惯性融合导航方法 梁宇潇, 高东 (201)
- 方向显著性特征分布的加权散度红外弱小目标增强检测 王怡雯, 郑伟, 邢成龙 (215)
- 航天器碰撞概率简化计算方法的比较与应用 王宁, 郭建新, 周敬博 (226)
- 偏远林区单北斗/多模 GNSS 实时单点定位性能比较 叶少春, 徐文兵, 尹潇 (235)
- 智慧发射场指挥监控系统设计 刘梓琰, 徐文晓, 范浩鑫, 王冠, 刘巧珍 (243)

Survey and Strategy

- Strategic Analysis of Scientific Activities and Study on the Overall Plan of Scientific Operation Platforms Based on the Lunar Research StationPEI Zhaoyu, WANG Qiong, XU Lin, ZHANG Chenxuan, ZHANG Feng, ZHANG Xianguo, WANG Huijuan, JIA Yingzhuo, LIU Yang, XUE Changbin, ZHANG Jinhai, ZHANG Tianxin, PENG Jing, WANG Chi, ZOU Yongliao (1)
- Analysis and Implications of NASA's Moon to Mars Strategic ArchitectureXIA Yifeng, GAO Yuyue, ZHOU Cheng (15)

Research Articles

Review

- Research on Ultracold Atom Physics in MicrogravityLI Lin, WANG Bin, ZHOU Xiaoji, CHEN Xuzong, LI Tang, LIU Liang (29)

Space Physics

- Simulation on the Mechanism of Harmonic Maser Emission Through the Wave Coalescence ProcessLIU Gonglin, NING Hao, NI Sulan, LI Chuanyang, ZHANG Zilong, LI Yaokun, CHEN Yao (56)
- Identification Model of Pi2 Pulsation Based on One-dimensional Residual Convolutional Neural NetworkZHANG Yiyue, ZOU Ziming, FANG Shaofeng (66)
- Machine Learning Solar Full Disk Flare Operational ForecastingLI Ming, CUI Yanmei, LUO Bingxian (82)
- Using Deep Learning to Achieve Short Term Business Forecast of *Dst* IndexNIU Ben, HUANG Zhi (91)
- Seasonal Variation Characteristics of Sodium Layer in Low Latitude by LidarHE Shimin, ZHANG Tiemin, CHAI Weiwei, ZHANG Yimin, YANG Dali, PENG Hongyan, WANG Jihong (102)
- Seasonal Transition Study of Thermospheric Atmospheric Composition Ratios at Twilight Based on Fengyun-3E Satellite DetectionSHI Zheng, FU Liping, JIANG Fang, MAO Tian (113)
- Inversion of Atmospheric Temperature Based on THz RadiometerZHU Jiawei, ZHOU Chen, ZHAO Zhengyu, LIU Yi (125)
- Research and Experimental Verification of Atmospheric Polarization State in the Near-infrared BandCHEN Zhixing, GOU Wanxiang, TONG Shuai, ZHANG Mengyao, LI Chonghui (135)

Microgravity and Space Life Science

- Steam Condensing Characteristics in a Horizontal Circular Tube under Rotating ActionZHANG Leigang, RU Meng, LI Hao, YUE Liwen, CHEN Zhenqian, MA Yanyang (149)
- Effects of Radiation and Simulated Weightlessness on Rat EEG and Its MechanismFENG Jundong, TIAN Liuxin, LI Qian, ZHAO Xida, YANG Yingqing, WANG Weitai (162)

Space Exploration Technology

- Analysis of the Influence and Importance of Laser Frequency Fluctuation on Laser Interference Simulation System for Space Gravitational Wave DetectionLIU Yu, ZHANG Yuzhu, PENG Xiaodong, ZHAO Mengyuan, YANG Zhen, TANG Wenlin, QIANG Li'e (179)
- Elastic Tube Model Predictive Control for Test Mass Capture for Space-borne Gravitational Wave DetectionHE Xiongfeng, LU Wei, XU Nuo, WANG Pengcheng, ZHANG Yonghe, CUI Bing, XIA Yuanqing (189)
- Geomagnetic/Inertial Fusion Navigation Method Based on Magnetic Anomaly Gradient MeasurementLIANG Yuxiao, GAO Dong (201)
- Weighted Divergence of Directionally Salient Features for Infrared Small Target Detection EnhancementWANG Yiwen, ZHENG Wei, XING Chenglong (215)
- Comparison and Application of Simplified Calculation Methods for Spacecraft Collision ProbabilityWANG Ning, GUO Jianxin, ZHOU Jingbo (226)
- Comparison on Real-time Single Point Positioning Performance of Single Beidou/Multi-mode GNSS in Remote Forested AreasYE Shaochun, XU Wenbing, YIN Xiao (235)
- Design of C3I System for Intelligent Space Launch SitesLIU Ziyang, XU Wenxiao, FAN Haoxin, WANG Guan, LIU Qiaozhen (243)