

中国惯性技术学报

2018 年 4 月

第 26 卷 第 2 期

目 次

• 惯性系统研究与分析 •

基于格网系的双航海惯导定位信息融合

..... 王 林, 吴文启, 魏 国, 曹聚亮, 铁俊波 (141)

基于抗差自适应 Kalman 滤波的车辆定位新方法

..... 贾 勇, 李岁劳, 时文涛, 秦永元 (149)

基于自适应强跟踪滤波的捷联惯导/里程计组合导航方法

..... 李士心, 黄凤荣, 邱时前, 范超男 (156)

基于神经网络的惯性平台温度场仿真模型修正方法

..... 刘 昱, 赵 鑫, 王晓丹, 张 宇, 周宇轩 (162)

基于 MEMS 惯性传感器的高精度步长估计算法

..... 路永乐, 陈永炜, 邱 克, 郭俊启, 余 跃, 刘 宇 (167)

• 组合导航技术 •

空间非合作目标近程交会仅测角相对导航方法

..... 龚柏春, 李 爽, 郑莉莉, 周文勇 (173)

三频差分 GNSS/INS 紧组合模型

..... 肖 凯, 孙付平, 王浩源 (180)

基于椭球拟合的磁梯度张量系统集成校正

..... 李青竹, 李志宁, 张英堂, 尹 刚, 李金朋 (187)

基于粒子群优化的 UKF 在 SINS/GPS 组合导航中的应用

..... 徐晓苏, 闫琳宇, 吴晓飞, 庞 东, 彭源源 (196)

一种基于概率数据关联的地磁匹配 ICCP 算法

..... 肖 晶, 段修生, 齐晓慧 (202)

基于光电测量的双站系统多目标跟踪

..... 恽 鹏, 吴盘龙, 何 山 (209)

北斗/INS 紧组合的惯性辅助三频周跳探测和修复

..... 肖 凯, 孙付平, 王浩源, 张伦东, 刘 帅 (215)

MEDLL 辅助的 GNSS/INS 系统欺骗信号辨识方法

..... 许 睿, 丁梦羽, 孟 赛, 刘建业 (223)

基于最邻近规则的移动端行人运动特征辨识

..... 孙 伟, 杨一涵, 孙 枫, 姜 伟 (231)

基于栅格法的室内指示路径规划算法

..... 程向红, 祁 艺 (236)

百叶遮光罩对卡塞格林系统能量集中度的影响

..... 丁小昆, 胡晓东, 王维科, 魏 青 (241)

• 控制与动力学 •

基于扩张观测器的四旋翼无人机轨迹鲁棒滑模控制

..... 张居乾, 师玉茹, 任朝晖, 闻邦椿 (247)

基于点云矩形面特征的故障航天器位姿测量

..... 郁 丰, 赵 依, 汪永生 (255)

亚轨道可重复使用飞行器轨迹/总体参数一体化优化方法

..... 黄瑞松, 李 浩, 韦常柱, 崔乃刚 (261)

面向多飞行器的一致性协同估计方法

..... 杨 明, 赵恩娇, 晁 涛, 王松艳 (268)

• 惯性仪表研究与设计 •

MEMS 环形谐振陀螺的结构设计与振动特性分析

..... 寇志伟, 刘 俊, 曹慧亮, 石云波, 张英杰 (275)

期刊基本参数: CN 12-1222/O3*1989*b*A4*140*zh*+en*P*¥60.00*1500*21*2018-04

CONTENTS

• Inertial System Research and Analysis •

Positioning information fusion for dual marine INSs based on grid frame

.....WANG Lin, WU Wenqi, WEI Guo, CAO Juliang, TIE Junbo (141)

New vehicle positioning method based on robust adaptive Kalman filter

.....JIA Yong, LI Suilao, SHI Wentao, QIN Yongyuan (149)

SINS/Odometer integrated navigation method based on adaptive strong tracking filter

.....LI Shixin, HUANG Fengrong, QIU Shiqian, FAN Chaonan (156)

Simulation model correction method of inertial platform temperature field based on neural network

.....LIU Yu, ZHAO Xin, WANG XIAO Dan, ZHANG Yu, ZHOU Yuxuan (162)

High-precision step-length estimation method based on MEMS inertial sensor

.....LU Yongle, CHEN Yongwei, DI Ke, GUO Junqi, YU Yue, LIU Yu (167)

• Integrated Navigation Technology •

Angles-only relative navigation algorithm for close-in proximity of space non-cooperative target

.....GONG Baichun, LI Shuang, ZHENG Lili, ZHOU Wenyong (173)

Triple-frequency differential GNSS/INS tightly coupled integration model

.....XIAO Kai, SUN Fuping, WANG Yuanhao (180)

Integrated calibration of magnetic gradient tensor system based on ellipsoid fitting

.....LI Qingzhu, LI Zhining, ZHANG Yingtang, YIN Gang, LI Jinpeng (187)

Unscented Kalman filter based on particle swarm optimization algorithm in SINS/GPS integrated navigation system

.....XU Xiao-su, YAN Lin-yu, WU Xiao-fei, PANG Dong, PENG Yuanyuan (196)

Iterated closest contour point algorithm for geomagnetic matching based on probability data association

.....XIAO Jing, DUAN Xiu-sheng, QI Xiao-hui (202)

Multi-target tracking of dual-station system based on photoelectric measurement

..... YUN Peng, WU Panlong, HE Shan (209)

Inertial aided triple-frequency cycle slip detection and repair of BDS/INS tightly-coupled integration

..... XIAO Kai, SUN Fuping, WANG Haoyuan, ZHANG Lundong, LIU Shuai (215)

Spoofing interference identification technique of MEDLL aided GNSS/INS system

..... XU Rui, DING Mengyu, MENG Qian, LIU Jianye (223)

Identification of pedestrian motion characteristics based on k-nearest neighbor rule

..... SUN Wei, YANG Yihan, SUN Feng, JIANG Wei (231)

Indoor indicator path planning algorithm based on grid method

..... CHENG Xianghong, QI Yi (236)

Effect of shutter-type baffle on energy concentration of Cassegrain system

..... DING Xiaokun, HU Xiaodong, WANG Weike, WEI Qing (241)

• Control and Dynamics •

Robust sliding mode control for quadrotor UAV trajectory based on extended state observer

..... ZHANG Jujian, SHI Yuru, REN Zhaojun, WEN Bangchun (247)

Pose measurement for malfunctioned spacecraft by utilizing rectangular feature extracted from point cloud

..... YU Feng, ZHAO Yi, WANG Yongsheng (255)

Integrated optimization method of trajectory/system parameters for sub-orbital reusable launch vehicles

..... HUANG Ruisong, LI Hao, WEI Changzhu, CUI Naigang (261)

Cooperative estimation method for multiple flight vehicles based on consensus theory

..... YANG Ming, ZHAO Enjiao, CHAO Tao, WANG Songyan (268)

• Inertial Instrument Research and Design •

Structure design and vibration characteristics analysis of MEMS vibrating ring gyroscope

..... KOU Zhiwei, LIU Jun, CAO Huiliang, SHI Yunbo, ZHANG Yingjie (275)