

中国惯性技术学报

2018年12月

第26卷 第6期(卷终)

目 次

• 惯性系统研究与分析 •

基于伪标准差和 N-P 准则的行人导航零速检测

..... 戴洪德, 李松林, 周绍磊, 全闻捷 (701)

基于多项式迭代的等效旋转矢量微分方程精确数值算法

..... 严恭敏, 李思锦, 秦永元 (708)

基于局部可观测性分析的惯性平台连续自标定路径优化设计

..... 王琪, 汪立新, 秦伟伟, 沈强 (713)

一种变加速度的弹用双矢量空中对准方法

..... 徐云, 洪榛, 罗志航, 朱欣华, 苏岩 (721)

基于复连续小波变换和 MEMS 加速度计测量的管道连接器辨识 (英文)

..... 管练武, 高延滨, 刘繁明, 彭泽波, Aboelmagd Noureldin (726)

基于可穿戴式 MIMU 的个人导航修正算法

..... 刘宇, 向高军, 路永乐, 邸克, 曹原, 司学迁 (732)

• 组合导航技术 •

一种改进的 BEMD 阈值去噪算法在单目视觉定位中的应用

..... 柳笛, 陈熙源, 方文辉 (737)

矢量频率跟踪辅助锁相环的设计与实现

..... 王前, 金天, 吴雨航, 邓若凡 (747)

基于双向重投影的双目视觉里程计

..... 张涛, 陈浩, 闫捷, 李瑶 (752)

基于自适应姿态估计的 MIMU/GPS 紧组合导航算法

..... 单斌, 张复建, 杨波, 王跃钢, 薛亮, 腾红磊 (760)

基于鲁棒无迹卡尔曼滤波的无线室内定位算法

..... 高端阳, 李安, 傅军, 周鑫 (768)

以扰动重力为边值条件确定外部扰动重力场

.....田家磊, 李新星, 刘晓刚, 冯进凯, 范 雕 (773)

基于因子图的鲁棒性增量平滑算法的水面无人艇组合导航方法

.....戴海发, 卞鸿巍, 马 恒, 王荣颖 (778)

粒子群算法在惯性/地磁组合导航航迹规划中的应用

.....乔 楠, 王立辉, 孙德胜, 马明珠, 余 乐 (787)

一种顾及加权水平精度因子的室内宽带定位算法

.....尚俊娜, 刘 参 (792)

基于车轮安装惯性测量单元的车载组合导航

.....陈映秋, 旷 俭, 牛小骥, 李 由, 高柯夫, 刘经南 (799)

行进间对准参数误差灵敏度分析

.....王立兵, 赵 圆, 温 习 (805)

• 惯性仪表研究与设计 •

三浮陀螺仪径向有源磁悬浮位置检测建模与优化设计

.....吴 辽, 杨孟兴, 王 卿, 樊 理, 申志刚 (812)

基于参数激励的 MEMS 陀螺电馈通抑制方法

.....赵鹤鸣, 郑 奋, 程梦梦, 徐大诚, 郭述文 (817)

• 控制与动力学 •

基于状态相关黎卡提方程的非线性协同制导律

.....郭志强, 周绍磊, 于运治, 李晓宝 (822)

有色噪声下的目标跟踪卡尔曼滤波新算法

.....林 旭, 刘俊钊 (830)

• 可靠性研究 •

基于加速因子不变原则的加速度计可靠性分析

.....盖炳良, 滕克难, 王浩伟, 韩建立, 李高春 (835)

线性时变时滞连续-离散描述系统鲁棒故障诊断滤波器设计

.....梁天添, 王 茂 (841)

期刊基本参数: CN 12-1222/O3*1989*b*A4*148*zh+en*P*¥60.00*1200*23*2018-12

CONTENTS

• Inertial System Research and Analysis •

- Pedestrian navigation zero-velocity detection based on pseudo-standard deviation and N-P criterion
..... DAI Hongde, LI Songlin, ZHOU Shaolei, QUAN Wenjie (701)
- Accurate numerical solution for differential equation of equivalent rotation vector based on polynomial iteration
..... YAN Gongmin, LI Sijin, QIN Yongyuan (708)
- Continuous self-calibration path optimization design of inertial platform based on local observability analysis
..... WANG Qi, WANG Lixin, QIN Weiwei, SHEN Qiang (713)
- A two-vector alignment method for flying projectiles based on variable acceleration
..... XU Yun, HONG Zhen, LUO Zhihang, ZHU Xinhua, SU Yan (721)
- Pipeline junction recognition by complex continuous wavelet transform and MEMS accelerometer measurement
..... GUAN Lianwu, GAO Yanbin, LIU Fanming, PENG Zebo, ABOELMAGD Noureldin (726)
- Personal navigation correction algorithm based on wearable MIMU
..... LIU Yu, XIANG Gaojun, LU Yongle, DI Ke, CAO Yuan, SI Xueqian (732)

• Integrated Navigation Technology •

- Application of improved BEMD threshold denoising algorithm in monocular visual odometer
..... LIU Di, CHEN Xiyuan, FANG Wenhui (737)
- Design and implementation of phase lock loop assisted by vector frequency tracking
..... WANG Qian, JIN Tian, WU Yuhang, DENG Ruofan (747)
- Binocular visual odometry based on bi-direction reprojection
..... ZHANG Tao, CHEN Hao, YAN Jie, LI Yao (752)
- High-precision tightly integrated MIMU/GPS navigation algorithm based on adaptive attitude estimation
..... SHAN Bin, ZHANG Fujian, YANG Bo, WANG Yuegang, XUE Liang, TENG Honglei (760)
- Wireless indoor location algorithm based on robust unscented Kalman filter
..... GAO Duanyang, LI An, FU Jun, ZHOU Xin (768)

Determining the external disturbing gravity field by applying gravity disturbance as boundary value condition

..... TIAN Jialei, LI Xinxing, LIU Xiaogang, FENG Jinkai, FAN Diao (773)

Application of robust incremental smoothing algorithm based on factor graph in integrated navigation of unmanned surface vehicle

..... DAI Haifa, BIAN Hongwei, MA Heng, WANG Rongyin (778)

Application of particle swarm optimization in track planning of inertial/geomagnetic integrated navigation

..... QIAO Nan, WANG Lihui, SUN Desheng, MA Mingzhu, YU Le (787)

Broadband indoor localization algorithm taking into account weighted horizontal dilution of precision

..... SHANG Junna, LIU Can (792)

Vehicle integrated navigation based on wheel mounted MEMS-IMU

..... CHEN Yingqiu, KUANG Jian, NIU Xiaoji, LI You, GAO Kefu, LIU Jingnan (799)

Analysis on error sensitivity of in-motion alignment parameters

..... WANG Libing, ZHAO Yuan, WEN Xi (805)

• Inertial Instrument Research and Design •

Modeling and optimization design for position detection of radial active magnetic bearing in three-floated gyroscope

..... WU Liao, YANG Mengxing, WANG Qing, FAN li, SHEN Zhigang (812)

MEMS gyroscope electrical feed-through suppression method based on parameter excitation

..... ZHAO Heming, ZHENG Fen, CHENG Mengmeng, XU Dacheng, GUO Shuwen (817)

• Control and Dynamics •

Nonlinear cooperative guidance law based on state-dependent Riccati-equation

..... GUO Zhiqiang, ZHOU Shaolei, YU Yunzhi, LI Xiaobao (822)

New Kalman filtering algorithm for target tracking with colored noise

..... LIN Xu, LIU Junzhao (830)

• Reliability Research •

Reliability analysis for accelerometers based on invariant principle of acceleration factor

..... GAI Bingliang, TENG Kenan, WANG Haowei, HAN Jianli, LI Gaochun (835)

Robust fault diagnosis filer design for linear sampled-data descriptor systems with time-varying delay

..... LIANG Tiantian, WANG Mao (841)