

美国《工程索引》(Ei Compendex)收录刊源

ISSN 1005-6734

CODEN ZGJXAP

中国惯性技术 学报

Journal of Chinese Inertial Technology

ZHONGGUO GUANXING JISHU XUEBAO

第20卷 第2期 2012年4月

Vol. 20 No. 2 Apr. 2012

2

2012

中国惯性技术学会主办



中国惯性技术学报

2012年4月 第20卷 第2期

目 次

惯性系统研究与分析

- 一种高动态使用微惯性测量单元的实现..... 李 枝, 代 刚, 唐海林, 何晓平, 彭 勃(127)
一种基于二次优化的改进圆锥算法..... 陈建峰, 陈熙源, 祝雪芬(131)
基于超导的全张量重力梯度敏感头设计..... 贾 明, 杨功流(136)
里程计辅助陆用惯导行进间对准方法..... 肖 焰, 王清哲, 付梦印, 张继伟(140)
双轴旋转式SINS自主标定技术..... 黄凤荣, 侯 斌, 孙伟强, 陆全聘(146)
速率偏频激光陀螺系统速度数值积分算法误差分析与优化(英文)..... 宋 敏, 吴文启, 于化鹏, 冯国虎(152)
基于互补滤波的惯导系统水平阻尼网络设计..... 何虔恩, 高钟毓, 吴秋平, 付文清(157)
基于四元数卡尔曼滤波的捷联惯导初始对准算法..... 周 琪, 秦永元, 张金红, 成 研(162)
基于惯性参考系基准的快速传递对准方法..... 王清哲, 付梦印, 肖 焰, 蔡善军(168)

组合导航技术

- 抗差自适应插值粒子滤波及其在组合导航中的应用..... 高社生, 宋飞彪, 薛 丽(173)
机载光电/惯性组合着舰导引算法的地面验证..... 王 丹, 王 瑞, 冯培德(178)
基于概率统计方法的微弱GPS信号捕获算法..... 朱建良, 王兴全, 吴盈龙, 薄煜明(183)
一种提高车载定位定向系统定位精度的方法..... 王东升, 蔡俊华, 林晓彬, 杨 帆, 刘真晖, 陈兴洲(187)
顾及高程差异的网络差分对流层误差内插模型..... 潘树国, 王娟娟, 沈雪峰, 王 庆(192)
基于规划路径约束的地形辅助导航算法..... 李世丹, 王德生(196)
XNAV/UVNAV/SINS组合导航在航天器轨道机动中的应用..... 杨成伟, 郑建华(200)
基于轨迹约束的地磁场测量误差修正方法..... 刘玉霞, 周 军, 葛致磊(205)
一种组合导航信息融合算法品质评估方法..... 赵 欣, 王跃钢, 王仕成, 张金生, 杨述华(211)
移动卫星天线指向矢量辅助组合导航系统方法..... 张华强, 赵 刻(220)
GPS/INS组合导航系统中的高斯粒子滤波混和算法..... 熊 剑, 郭 杭, 熊 智, 周程和(225)

惯性仪表研究与设计

- 双H型石英陀螺电容耦合分析与电极优化设计..... 冯立辉, 张志雄, 崔 芳, 王 健, 孙雨南(230)
控制力矩陀螺框架伺服系统的超低速测速方法..... 鲁 明, 李耀华, 张激扬, 翟百臣(234)

测试技术与设备

- Bootstrap方法在导弹落点密集度评估中的误用..... 郑小兵, 董景新, 孟令晶, 张志国(239)
基于光纤光栅技术的船体变形修正技术..... 王 可, 毛 亮, 周海渊(244)
火箭橇试验分离制导工具误差的有效性分析..... 王 超, 王跃钢(248)

期刊基本参数: CN12-1222/O3*1989*b*A4*126*zh*+en*P*¥15.00*1500*25*2012-04

Contents

Inertial System Research and Analysis

Realization of micro inertial measurement unit used in high dynamic environment	LI Mei, DAI Gang, TANG Hai-lin, HE Xiao-ping, PENG Bo (127)
An improved coning algorithm based on second optimization.....	CHEM Jian-feng, CHEN Xi-yuan, ZHU Xue-fen (131)
Design of sensing head for gravity gradient tensor based on superconductor.....	JIA Ming, YANG Gong-liu (136)
INS in-motion alignment for land-vehicle aided by odometer	XIAO Xuan , WANG Qing-zhe, FU Meng-Yin, ZHANG Ji-wei (140)
Self-calibration for dual-axis rotary SINS.....	HUANG Feng-rong, HOU Bin, SUN Wei-qiang, LU Quan-chong (146)
Error analysis and optimization of velocity numerical integration algorithms for triad rate-biased RLG system	SONG Min, WU Wen-qi, YU Hua-peng, FENG Guo-hu (152)
Design of horizontal damping network for INS based on complementary filtering	HE Qian-en, GAO Zhong-yu, WU Qiu-ping, FU Wen-qing (157)
Initial alignment algorithm for SINS based on quaternion Kalman filter	ZHOU Qi, QIN Yong-yuan, ZHANG Jin-hong, CHENG Yan (162)
Rapid transfer alignment method based on inertial reference frame	WANG Qing-zhe, FU Meng-yin, XIAO Xuan, CAI Shan-jun (168)

Integrated Navigation Technology

Robust adaptive interpolation particle filtering and application in integrated navigation system	GAO She-sheng, SONG Fei-biao, XUE Li (173)
Field verification of aircraft carrier landing algorithm based on integrated airborne infrared camera/inertial navigation system	WANG Dan, WANG Wei, FENG Pei-de (178)
Acquisition algorithm for weak GPS signal based on probability statistics method	ZHU Jian-liang, WANG Xing-quan, WU Pan-long, BO Yu-ming (183)
Method of improving the positioning precision about inertial positioning and heading system for land vehicle	WANG Dong-sheng, CAI Jun-hua, LIN Xiao-bin, YANG Fan, LIU Zhen-hui, CHEN Xing-zhou (187)
Interpolation model for troposphere delay error on network differential considering elevation difference	PAN Shu-guo, WANG Shan-shan, SHEN Xue-feng, WANG Qing (192)
Terrain aided navigation algorithm based on planned path.....	LI Shi-dan, WANG De-sheng (196)
XNAV/UVNAV/SINS integrated navigation system in spacecraft orbital maneuver.....	YANG Cheng-wei, ZHENG Jian-hua (200)
Correction method of magnetic measurement error based on locus constraints.....	LIU Yu-xia, ZHOU Jun, GE Zhi-lei (205)
Quality evaluating method of integrated navigation information fusion algorithm	ZHAO Xin, WANG Yue-gang, WANG Shi-cheng, ZHANG Jin-sheng, YANG Shu-hua (211)
Satellite antenna pointing vector aiding method for SINS/GPS integrated navigation system	ZHANG Hua-qiang, ZHAO Yan (220)
Gaussian particle filtering hybrid algorithm for GPS/INS integrated navigation system	XIONG Jian, GUO Hang, XIONG Zhi, ZHOU Zhai-he (225)

Inertial Instrument Research and Design

Capacitance coupling analysis and electrode optimum design for double H type quartz gyroscope	FENG Li-hui, HANG Zhi-xiong, CUI Fang, WANG Jian, SUN Yu-nan (230)
Ultra-low speed detection method for CMG gimbal servo systems.....	LU Ming, LI Yao-hua, ZHANG Ji-yang, ZHAI Bai-chen (234)

Test Technology and Equipment

Misapplication of Bootstrap method in dispersion assessment of missile fall points	ZHENG Xiao-bing, DONG Jing-xin, MENG Ling-jing, ZHANG Zhi-guo (239)
Technique of ship hull deformation system correction based on optical fiber technology	WANG Ke, MAO Liang, ZHOU Hai-yuan (244)
Availability analysis of guidance instrument error separation in rocket sled experiment.....	WANG Chao, WANG Yue-gang (248)