



ISSN 1000-6893
CN 11-1929/V

中国航空学会 北京航空航天大学

航空学报

HANGKONG XUEBAO Vol.34 No.7

2013.7

ACTA
AERONAUTICA
ET ASTRONAUTICA
SINICA

目 次

流体力学与飞行力学

- 基于径向基函数的网格变形及非线性气动弹性时域仿真研究(论文) 谢亮, 徐敏, 安效民, 蔡天星, 陈韦贤(1501)
- 活塞理论气动力静压修正方法及其在曲壁板颤振分析中的应用(论文) ... 周建, 杨智春, 贺顺(1512)
- 捕获非合作目标后航天器的自主稳定技术研究(论文) 韦文书, 荆武兴, 高长生(1520)
- RANS/LES 在超声速突起物绕流中的应用研究(论文) 陈琦, 司芳芳, 陈坚强, 袁先旭, 谢昱飞(1531)
- 复杂旋翼流场的耦合欧拉-拉格朗日数值方法(论文) 魏鹏, 史勇杰, 徐国华(1538)
- 低压涡轮叶栅流动中转换模型的校验及改进(论文) 罗天培, 柳阳威, 陆利蓬(1548)
- 平尾积冰对飞机纵向气动参数的影响(论文) 徐忠达, 苏媛, 曹义华(1563)
- 前置不同诱导轮高速离心泵旋转空化特性研究(论文) 郭晓梅, 李跌, 崔宝玲, 朱祖超(1572)
- 高超声速黏性干扰相关性参数的修正(简报) 龚安龙, 刘周, 王晓璐, 周伟江(1582)
- 水滴撞击特性的粒子统计法研究(简报) 韩雅慧, 柯鹏, 杨春信, 刘丹阳(1588)

固体力学与飞行器总体设计

- 定向凝固镍基高温合金缺口低循环疲劳性能及寿命预测(论文) 杨晓光, 黄佳, 王井科, 胡晓安, 石多奇(1596)
- 认知不确定性下可靠性灵敏度分析的新指标(论文) 锁斌, 曾超, 程永生, 李世玲(1605)
- 复合材料帽型筋条脱粘的失效机理分析(论文) 孙晶晶, 张晓晶, 宫占峰, 汪海(1616)
- 单面螺纹抽钉干涉配合复合材料连接件挤压强度研究(论文) 魏景超, 矫桂琼, 闫照明, 刘风雷(1627)
- 纺织复合材料细观力学分析的一般性周期性边界条件及其有限元实现(论文) 张超, 许希武, 严雪(1636)
- 基于 MFBD 的多级多层系统修复性维修过程建模与仿真(论文) 王恺, 郭霖瀚, 高渤程, 王乃超(1646)

电子与控制

- 机载 MIMO 雷达空时自适应杂波对消器(论文) 曹杨, 冯大政, 水鹏朗, 向聪(1654)
- 舰载机理想着舰点垂直运动的预估与补偿(论文) 周鑫, 彭荣鲲, 袁锁中(1663)
- 基于流水避石原理的无人机三维航路规划方法(论文)..... 梁宵, 王宏伦, 李大伟, 吕文涛(1670)
- 异构 MAS 结构下的空天资源多阶段协同任务规划方法(论文)
..... 李军, 李军, 钟志农, 景宁, 胡卫东(1682)
- 具有几何和光照不变性的不变矩构建研究(简报)
..... 徐贵力, 钟志伟, 王彪, 田裕鹏, 郭瑞鹏, 李开宇(1698)

材料工程与机械制造

- 整体叶盘高效强力复合铣 A 轴高精度控制技术研究(论文) 赵鹏兵, 史耀耀, 宁立群(1706)
- 开孔曲面自动铺放轨迹规划算法研究(论文) 李俊斐, 王显峰, 肖军(1716)
- 3D 针刺 C/SiC 复合材料螺栓的低成本制备及力学性能(论文) 刘杰, 李海滨, 刘小瀛(1724)
- 基于结构设计的自调节铺放轨迹规划算法(论文)..... 文立伟, 李俊斐, 王显峰, 肖军(1731)
- TC4 钛合金高效磨削加工用环形热管砂轮的研制(论文)
..... 赫青山, 傅玉灿, 徐鸿钧, 马可, 陈琛(1740)
- 飞机油箱检查机器人的仿生结构及运动学研究(论文)
..... 高庆吉, 王维娟, 牛国臣, 王磊, 郑遵超(1748)

期刊基本参数: CN 11-1929/V * 1965 * b * A4 * 256 * zh * P * ¥80.00 * 1200 * 27 * 2013-07

CONTENTS

Fluid Mechanics and Flight Mechanics

- Research of Mesh Deforming Method Based on Radial Basis Functions and Nonlinear Aeroelastic Simulation(P)
..... XIE Liang, XU Min, AN Xiaomin, CAI Tianxing, CHEN Weixian(1501)
- Static Pressure Modification for Piston Theory Aerodynamics and Its Application to the Analysis of Curved Panel Flutter
(P) ZHOU Jian, YANG Zhichun, HE Shun(1512)
- Research Automatic Stability Technology of Spacecraft Assembly with Captured Non-cooperative Targets on Orbit(P)
..... WEI Wenshu, JING Wuxing, GAO Changsheng(1520)
- Study of Protuberances in Supersonic Flow with RANS/LES Method(P)
..... CHEN Qi, SI Fangfang, CHEN Jianqiang, YUAN Xianxu, XIE Yufei(1531)
- Coupled Eulerian-Lagrangian Method for Complicated Rotor Flow Field Prediction(P)
..... WEI Peng, SHI Yongjie, XU Guohua(1538)
- Transition Model Assessment and Modification in Low-pressure Turbine Cascade(P)
..... LUO Tianpei, LIU Yangwei, LU Lipeng(1548)
- Effects of Tailplane Icing on Aircraft Longitudinal Aerodynamic Parameters(P).....
..... XU Zhongda, SU Yuan, CAO Yihua(1563)
- Research on the Rotation Cavitation Performance of High-speed Rotation Centrifugal Pump with Different Pre-positioned
Inducers(P) GUO Xiaomei, LI Yi, CUI Baoling, ZHU Zuchao(1572)
- Correction of Hypersonic Viscous Interaction Correlation Parameter(TN)
..... GONG Anlong, LIU Zhou, WANG Xiaolu, ZHOU Weijiang(1582)
- Research on Particle Statistic Method of Water Droplet Impingement Characteristics(TN)
..... HAN Yahui, KE Peng, YANG Chunxin, LIU Danyang(1588)

Solid Mechanics and Vehicle Conceptual Design

- Properties and Life Prediction of Low Cycle Fatigue Behavior on Notched DS Ni-based Superalloy(P)
..... YANG Xiaoguang, HUANG Jia, Wang Jingke, HU Xiaoan, SHI Duoqi(1596)
- New Index for Reliability Sensitivity Analysis Under Epistemic Uncertainty(P)
..... SUO Bin, ZENG Chao, CHENG Yongsheng, LI Shiling(1605)
- Failure Mechanism Study on Omega Stringer Debonding(P)
..... SUN Jingjing, ZHANG Xiaojing, GONG Zhanfeng, WANG Hai(1616)
- Bearing Strength of Composite Joints Interference-fitted with Blind Bolts(P)
..... WEI Jingchao, JIAO Guiqiong, YAN Zhaoming, LIU Fenglei(1627)

General Periodic Boundary Conditions and Their Application to Micromechanical Finite Element Analysis of Textile Composites(P) ZHANG Chao, XU Xiwu, YAN Xue(1636)

Corrective Maintenance Process Modeling and Simulation of Multi-indenture Multi-echelon Systems Based on MFBD(P) WANG Kai, GUO Linhan, GAO Bocheng, WANG Naichao(1646)

Electronics and Control

Space-time Adaptive Clutter Canceller Applied to Airborne MIMO Radar(P) CAO Yang, FENG Dazheng, SHUI Penglang, XIANG Cong(1654)

Prediction and Compensation for Vertical Motion of Ideal Touchdown Point in Carrier Landing(P) ZHOU Xin, PENG Rongkun, YUAN Suozhong(1663)

Three-dimensional Path Planning for Unmanned Aerial Vehicles Based on Principles of Stream Avoiding Obstacles(P) LIANG Xiao, WANG Honglun, LI Dawei, LV Wentao(1670)

Space-air Resources Multi-phase Cooperation Task Planning Approach Based on Heterogeneous MAS Model(P) LI Jun, LI Jun, ZHONG Zhinong, JING Ning, HU Weidong(1682)

Research on the Construction of Moment invariants of Geometry and Illumination Invariance(TN) XU Guili, ZHONG Zhiwei, WANG Biao, TIAN Yupeng, GUO Ruipeng, LI Kaiyu(1698)

Material Engineering and Mechanical Manufacturing

Technology Research on High-precision Control of A-axis in Efficient and Powerful Milling Machine for Blisk Manufacturing(P) ZHAO Pengbing, SHI Yaoyao, NING Liqun(1706)

Research on Trajectory Planning Method of Automated Tape Laying and Automated Fiber Placement for Surfaces with Holes(P) LI Junfei, WANG Xianfeng, XIAO Jun(1716)

Low Cost Preparation and Mechanical Property of Three-dimensional Needled C/SiC Bolts(P) LIU Jie, LI Haibin, LIU Xiaoying(1724)

Adjustment Algorithm Based on Structural Design for Automated Tape Laying and Automated Fiber Placement(P) WEN Liwei, LI Junfei, WANG Xianfeng, XIAO Jun(1731)

Development of Annular Heat Pipe Grinding Wheel for High Efficiency Machining of TC4 Titanium Alloy(P) HE Qingshan, FU Yucan, XU Hongjun, MA Ke, CHEN Chen(1740)

Study of Bionic Structure and Kinematics of Robot for Aircraft Fuel Tank Inspection(P) GAO Qingji, WANG Weijuan, NIU Guochen, WANG Lei, ZHENG Zunchao(1748)

P: Paper; TN: Technical Note