

中国科技论文统计用刊
中文核心期刊

ISSN 1672-9897
CODEN SLLHAD

实验流体力学

JOURNAL OF EXPERIMENTS IN FLUID MECHANICS

第31卷 第5期 Vol.31 No.5

2017.5

中国空气动力学会

目 次

• 研究进展 •

- 三维激光诱导荧光(3DLIF)技术及测量水体标量场设备研究……… 黄真理, 周维虎, 曲兆松 (1)

• 基础研究与应用 •

- 采用 CARS 试验技术与 UFPV 数值方法研究航空发动机燃烧室(英文) …… 熊模友, 乐嘉陵, 黄渊, 等 (15)

- 双旋流燃烧室两相喷雾试验和数值研究(英文)……… 刘日超, 乐嘉陵, 陈柳君, 等 (24)

- 垂直板上开窗区受限自由膜的形成……… 谢涵广, 胡剑光, 王成, 等 (32)

- 高速列车隧道通过中的气动效应动模型实验研究……… 宋军浩, 郭迪龙, 杨国伟, 等 (39)

- 螺旋桨滑流对飞机纵向气动特性的影响研究……… 李兴伟, 李聪, 高静, 等 (46)

- 基于翼尖涡物理特征的诱导阻力减阻机制实验研究……… 黄文涛, 向阳, 王笑, 等 (53)

- 平衡孔直径对离心泵小流量工况空化特性影响……… 赵伟国, 芦维强, 刘在伦 (60)

- 微型共轴双旋翼气动性能数值模拟与试验分析……… 雷瑶, 纪玉霞, 汪长炜 (67)

- 一种智能材料结构在变形体机翼气动特性研究中的应用……… 雷鹏轩, 王元靖, 吕彬彬, 等 (74)

• 测量技术 •

- 冰形表面激光光带中心线快速提取方法……… 康含玉, 刘桂华, 王斌, 等 (81)

• 实验设备及方法 •

- 风洞供气控制系统数字阀的设计与应用……… 康洪铭, 霍国, 陈辅政, 等 (88)

执行编辑 杨娟 英文审核 胡华雨

CONTENTS

Research Review

- Study on three dimensional laser-induced fluorescence (3DLIF) techniques and its instrument Huang Zhenli , Zhou Weihu , Qu Zhaosong (1)

Fundamental Research and Application

- Experimental and simulation study of aeroengine combustor based on CARS technology and UFPV approach Xiong Moyou , Le Jialing , Huang Yuan , et al (15)
- Experimental and numerical study on spray atomization in a double-swirler combustor Liu Richao , Le Jialing , Chen Liujun , et al (24)
- Formation of confined free film in the window on a vertical perforated plate Xie Hanguang , Hu Jianguang , Wang Cheng , et al (32)
- Experimental investigation on the aerodynamics of tunnel-passing for high speed train with a moving model rig Song Junhao , Guo Dilong , Yang Guowei , et al (39)
- Propeller slipstream effect on longitudinal aerodynamic characteristics of airplane Li Xingwei , Li Cong , Gao Jing , et al (46)
- Experimental study on drag-reduction mechanisms based on the physical characteristic of tip vortex Huang Wentao , Xiang Yang , Wang Xiao , et al (53)
- Effects of balance holes diameter on cavitation characteristics of centrifugal pump under low flow rates Zhao Weiguo , Lu Weiqiang , Liu Zailun (60)
- Numerical simulation and experimental study on aerodynamics of the micro coaxial rotors Lei Yao , Ji Yuxia , Wang Changwei (67)
- Application of a smart material structure in the study of aerodynamic characteristics of a morphing wing Lei Pengxuan , Wang Yuanjing , Lyu Binbin , et al (74)

Measuring Technique

- A fast method of extracting the laser light bar's centerline in the ice model Kang Hanyu , Liu Guihua , Wang Bin , et al (81)

Experimental Equipment and Method

- Design and application of digital valve in gas supply control system for wind tunnel Kang Hongming , Huo Guo , Chen Fuzheng , et al (88)