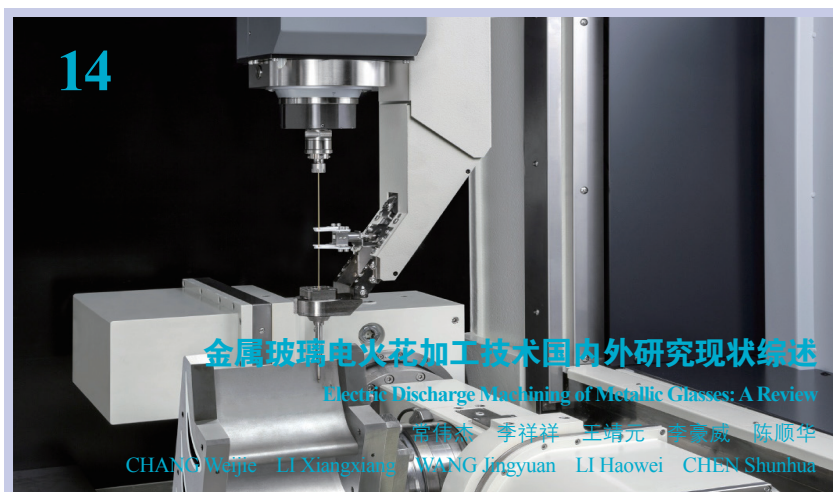


专稿 Feature



封面文章 Cover Story

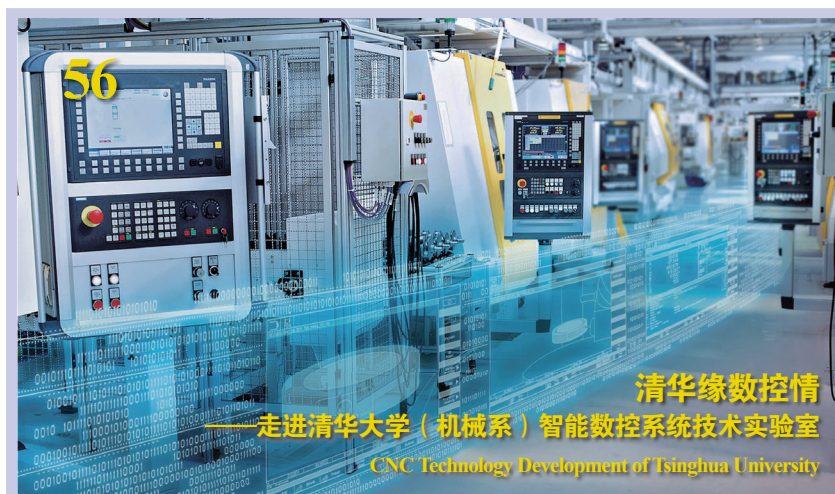
论坛 Forum

发动机关键部件制造技术  
Manufacturing Technology for  
Key Aero-Engine Components

- 20 航空发动机工艺研究及创新体系构建探讨  
张渝 于建华 雷力明 陆涛  
Discussion for Construction of Aero-Engine Processing Research and Innovation System  
ZHANG Yu YU Jianhua LEI Liming LU Tao
- 30 航发整体叶盘机器人磨削系统集成方案设计及验证  
黄云 李伟 肖贵坚 贺毅 何水 甲花索朗  
Design and Verification of Integrated Grinding System for Aero-Engine Integral Blade Disk Robot  
HUANG Yun LI Wei XIAO Guijian HE Yi HE Shui JIAHUA Suolang
- 37 精铸件收缩率分布规律研究进展  
卜昆 张雅莉 于茜 邱飞 田国良  
Research Development on Shrinkage Fraction Distribution of Investment Castings  
BU Kun ZHANG Yali YU Qian QIU Fei TIAN Guoliang
- 45 航空发动机用细长轴内方孔旋锻成形工艺研究  
王聚存 田天泰 马海鑫 姚俊征 张琦  
Rotary Forging Process for Inner Hole of Slender Shaft for Aero-Engine  
WANG Jucun TIAN Tiantai MA Haixin YAO Junzheng ZHANG Qi
- 50 环氧改性有机硅聚合物的制备及其在发动机叶片防飞溅涂层中的应用  
孙振宁 陈贻焱 钱建刚 王明存 张伟  
Synthesis of a Silicone Polymer Modified by Epoxy Resin and Its Application as Anti-Spatter Coating of Engine Blade for Laser Drilling  
SUN Zhenning CHEN Yichi QIAN Jiangan WANG Mingcun ZHANG Wei

## 走进科研

Approaching Science



## 研究论文

Research

- 58 飞机框间单向压紧制孔预紧固件布置优化  
—— 齐振超 王珉 陈文亮 王威  
Optimization of Pre-Tightening Arrangement for One-Side Pressed Hole Making Between Aircraft Frames  
QI Zhenchao WANG Min CHEN Wenliang WANG Wei
- 64 多孔金属结合剂CBN砂轮的研制及其高效磨削加工钛合金研究  
—— 杨薇 温学兵 肖红 赵彪 丁文锋  
Study on Design and Performance of Porous Metal-Bonded CBN Abrasive Wheels During Grinding of Ti-6Al-4V Titanium Alloy  
YANG Wei WEN Xuebing XIAO Hong ZHAO Biao DING Wenfeng
- 70 基于齿廓测量点的渐开线齿轮基圆圆心反求方法  
—— 魏建杰 汤洁 石照耀  
Reverse Calculation Method of Base Circle Center Based on Involute Profile Measuring Points  
WEI Jianjie TANG Jie SHI Zhaoyao
- 77 基于图像处理技术的油污干扰下硅钢片缺陷检测  
—— 彭宽宽 龚时华 王子悦 李德龙  
Defect Detection of Silicon Steel Strip Under Oil Pollution Disturbance Based on Image Processing Technology  
PENG Kuankuan GONG Shihua WANG Ziyue LI Delong
- 83 基于VSA的吊挂对接工艺方案研究  
—— 林祖伟  
Pylon Assembly Process Research Based on VSA  
LIN Zuwei
- 87 机器人自适应砂带磨削空速管关键技术研究  
—— 安寅平 胡昌浩 刘帅 邹莱 黄云  
Research on Key Technologies of Robot Adaptive Belt Grinding Pitot Tube  
AN Yinping HU Changhao LIU Shuai ZOU Lai HUANG Yun
- 92 内螺纹铣削加工轨迹建模及仿真  
—— 逢迪 金成哲 王书利 张莹 蔡瑛  
Modeling and Simulation of Machining Track of Internal Thread Cutting  
PANG Di JIN Chengzhe WANG Shuli ZHANG Ying CAI Ying