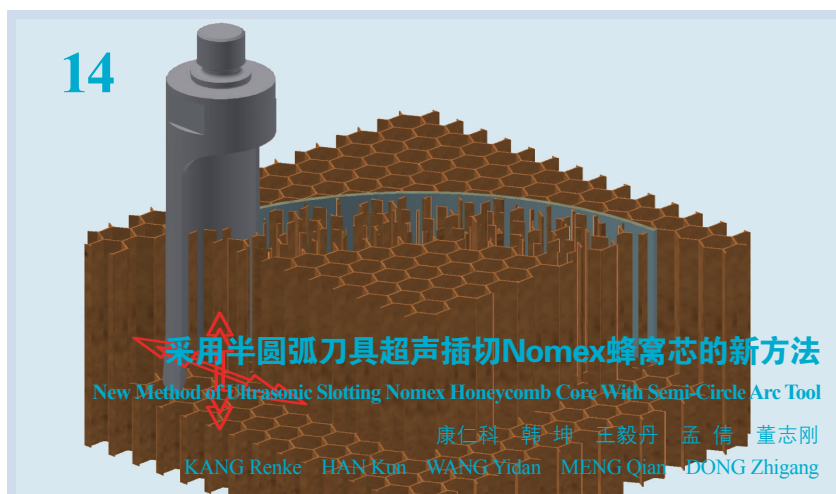


专稿 Feature



封面文章 Cover Story

论坛 Forum

高能束加工

High Energy Beam Processing

24 电子束熔丝成形TC17钛合金显微组织与拉伸性能研究

杨洋 吴凡 陈玮  
Investigation of Microstructure and Tensile Properties of TC17 Alloy Fabricated by Electron Beam Wire Deposition

YANG Yang WU Fan CHEN Wei

32 浅谈几种典型镁合金激光表面改性技术

黄泽亚 管迎春  
Preliminary Study of Laser Surface Modification Techniques for Magnesium Alloys

HUANG Zeya GUAN Yingchun

40 电子束表面造型对液冷冷板散热性能影响研究

赵桐 付鹏飞 唐振云 王涛 张贺宾  
Study on Influence of Electron Beam Surf-Sculpt on Cooling Performance of Liquid-Cooling Cold Plate

ZHAO Tong FU Pengfei TANG Zhenyun WANG Tao ZHANG Hebin

47 浅齿轮齿根激光冲击强化试验和仿真研究

李晨鹭 解丽静 程冠华 梁国祥  
Experimental and Simulation Study on Laser Shock Peening of Gear Root

LI Chenlu XIE Lijing CHENG Guanhua LIANG Guoxiang

53 激光选区熔化/热等静压复合成形Inconel 718组织与性能研究

滕庆 孙闪闪 薛鹏举 史玉升 魏青松  
Study on Microstructure and Properties of Inconel 718 Fabricated by Selective Laser Melting/Hot Isostatic Pressing Hybrid Forming Process

TENG Qing SUN Shanshan XUE Pengju SHI Yusheng WEI Qingsong

## 走进科研

Approaching Science



## 研究论文

Research

- 64 基于ANSYS Workbench的型材拉弯有限元仿真模块开发  
—— 韩志仁 罗雪磊  
Development of Finite Element Simulate Module of ANSYS Workbench on Profile  
Stretch-Bending HAN Zhiren LUO Xuelei
- 69 Nomex蜂窝夹层结构侧向变形机理及蜂窝稳定化  
—— 郝新超 胡杰  
Lateral Crush Mechanism and Honeycomb Stabilization of Nomex Honeycomb Sandwich  
Structure HAO Xinchao HU Jie
- 75 服役载荷下铝锂合金激光焊接T型接头残余应力的有限元分析  
—— 周旭东 吴友发 陈帅 占小红  
Effect of Service Loads on Residual Stresses of Al-Li Alloy T-Joint Using Laser Welding  
Through FE Analysis ZHOU Xudong WU Youfa CHEN Shuai ZHAN Xiaohong
- 83 自动铺带技术在复合材料小尺寸低曲率制件批量化制造上的应用  
—— 任卫安 马军 王钰淇 刘斌  
Application of Automatic Tape Laying Technology in Quantity Production of Composite  
Part With Small Size and Low Curvature REN Weian MA Jun WANG Yuqi LIU Bin
- 86 改善电解铣磨加工底面平整程度的研究  
—— 牛岫 曲宁松 李寒松  
Investigation on Improving Bottom Flatness in Electrochemical Mill-Grinding  
NIU Shen QU Ningsong LI Hansong
- 92 钻削微小孔技术在航空发动机燃油喷嘴喷口加工中的应用研究  
—— 石洪国 王福海 丁志纯 雷力明  
Research on Application of Micro-Hole Drilling Technology in Processing of Aero-Engine  
Fuel Nozzles SHI Hongguo WANG Fuhai DING Zhichun LEI Liming
- 97 航天器狭小空间总装紧固件预紧技术研究  
—— 宋晓晖 刘智斌 薛峰 顾磊  
Research of Bolt Pre-Tightening Technology in Narrow Space for Spacecraft Integration  
SONG Xiaohui LIU Zhibin XUE Feng GU Lei