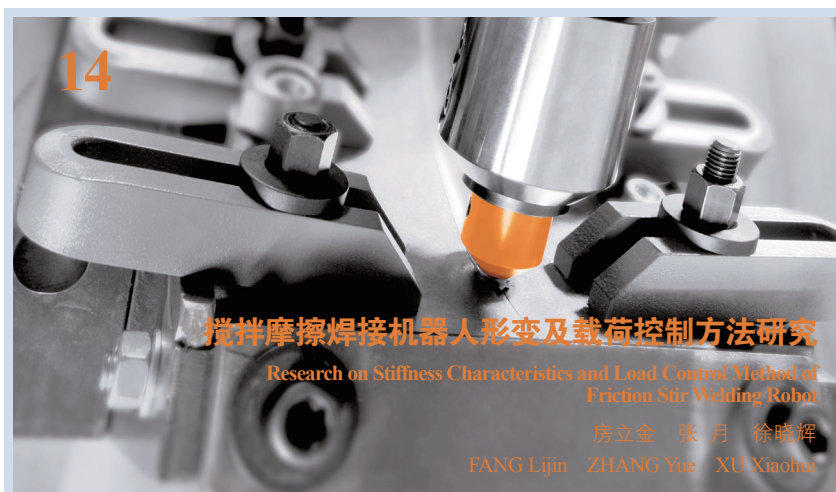


专稿 Feature



封面文章 Cover Story

论坛 Forum

机器人技术

Robotics

- 22 协作机器人外力感知与交互控制研究现状及展望
梅雪松 刘星 赵飞 孙铮 陶涛
Research Status and Prospects of External Force Perception and Interaction Control Methods for Collaborative Robots
MEI Xuesong LIU Xing ZHAO Fei SUN Zheng TAO Tao
- 36 航空制造领域移动机器人加工系统研究综述
郑炜 杜坤鹏 陈航 林伟 王刚 张益铭 王战奎
Review of Robot Mobile Machining System in Aviation Manufacturing
ZHENG Wei DU Kunpeng CHEN Hang LIN Wei WANG Gang
ZHANG Yiming WANG Zhanxi
- 42 面向航空发动机薄壁回转体复材构件装配的机器人调姿定位系统
张云志 孙年俊 刘建东 赵福龙 蒋倩
Robot Positioning System for Assembly of Thin-Walled Rotating Composite Components of Aero-Engine
ZHANG Yunzhi SUN Nianjun LIU Jiandong ZHAO Fulong JIANG Qian
- 50 一种双目视觉引导的工业机器人铣边方法
刘宇 皮兴来 周志军
A Method of Edge Milling for Industrial Robots Guided by Binocular Vision
LIU Yu PI Xinglai ZHOU Zhijun
- 57 安全扭矩约束下的多关节机器人轨迹跟随方法
张少林 王颖 王硕
Trajectory Following Method of Multi-Joint Robot Under Safe Torque Constraints
ZHANG Shaolin WANG Ying WANG Shuo
- 63 基于灰色关联法的航发叶片机器人砂带磨削精度控制技术
肖贵坚 张友栋 黄云 吕冲 贺毅
Robotic Belt Grinding Accuracy Control Technology of Aero-Engine Blade Based on Grey Correlation Method
XIAO Guijian ZHANG Youdong HUANG Yun LÜ Chong HE Yi

走进科研

Approaching Science



研究论文

Research

- 74 蜂窝夹层结构高精度面板的三维铣削研究
—— 李东升 游佳琪 王明明
Research on 3D Milling of Honeycomb Sandwich Structure High-Precision Panel
LI Dongsheng YOU Jiaqi WANG Mingming
- 83 Invar合金焊接技术研究现状及展望
—— 刘红兵 宣扬 杨瑾
Research Status and Prospect of Invar Alloy Welding Technology
LIU Hongbing XUAN Yang YANG Jin
- 89 基于手工铺贴曲面工装的自动铺带轨迹设计差异性研究
—— 任卫安 马军 杨倩倩 夏丽 万明燕
Research on Differences of Automatic Tape Laying Trajectory Design Based on Hand-Laid Tooling of Curved Surface
REN Weian MA Jun YANG Qianqian XIA Li WAN Mingyan
- 94 TC21钛合金转轴梁双闭角深槽腔高效铣削技术研究
—— 凌平 韦煜萍 胡宪明
Research on Efficient Milling Technology of TC21 Titanium Alloy Shaft Beam Double Closed Angle Deep Groove Cavity
LING Ping WEI Yuping HU Xianming