

专稿 Feature

14 低温挤压Mg-Sm-Ce系合金的微观组织与力学性能研究

潘虎成 蒋彩霞 张元 王森 杜森 任玉平 秦高梧
Microstructure and Mechanical Properties of Low-Temperature Extruded Mg-Sm-Ce Series Alloys
PAN Hucheng JIANG Caixia ZHANG Yuan WANG Sen DU Sen REN Yuping QIN Gaowu

封面文章 Cover Story

22 基于本构模型的Inconel 718材料动态力学响应分析

姜峰 李金鑫 徐军 沈哲明 姚红飞 朱冬伟 曾祥申 张超 张涛
Dynamic Mechanical Response Analysis of Inconel 718 Based on Constitutive Model
JIANG Feng LI Jinxin XU Jun SHEN Zheming YAO Hongfei ZHU Dongwei
ZENG Xiangshen ZHANG Chao ZHANG Tao

论坛 Forum

高强高韧材料 High Strength and High Toughness Materials

38 等温锻造对CNTs/SiC_p混杂增强铝基复合材料力学性能的影响

许慧 杜志楠 张艺铎 刘雅菲 徐严谨
Effect of Isothermal Forging on Mechanical Properties of CNTs/SiC_p Hybrid Reinforced Aluminum Matrix Composites
XU Hui DU Zhinan ZHANG Yitan LIU Yafei XU Yanjin

45 偏轴载荷下连续SiC纤维增强钛基复合材料的拉伸行为研究

王敏娟 陈永刚 齐金磊 孙光耀 王宝 黄旭 黄浩
Study on Tensile Behavior of Continuous SiC Fiber Reinforced Titanium Matrix Composites Under off-Axis Loading
WANG Minjuan CHEN Yonggang QI Jinlei SUN Guangyao WANG Bao HUANG Xu HUANG Hao

54 间隙原子及颗粒对激光增材制造高熵合金微观结构与力学性能影响的研究进展

高宏亮 苏海军 郭一诺 杨培鑫 夏乐 张卓 郭敏
Research Progress on Influence of Interstitial Atoms and Particles on Microstructure and Mechanical Properties of Laser Additive Manufacturing High-Entropy Alloys
GAO Hongliang SU Haijun GUO Yinuo YANG Peixin XIA Le ZHANG Zhuo GUO Min

64 金属/复合材料胶接界面强韧化技术研究进展

赵召 何惊华 张浩然 龙昌 程明 潘蕾
Review of Strengthening and Toughening Techniques in Metal/Composite Bonding Interface
ZHAO Zhao HE Jinghua ZHANG Haoran LONG Chang CHENG Ming PAN Lei

研究论文 Research

- 76 CFRP砂轮高速外圆磨削稳定性分析
秦鹏 冯伟 刘斐 张霖 杨淮文 曹乐 张国建
Stability Analysis of High Speed Grinding Process of CFRP Wheel
QIN Peng FENG Wei LIU Fei ZHANG Lin YANG Huaiwen CAO Le ZHANG Guojian
- 85 基于偏移补偿模型的大曲率复杂芯模编织牵引轨迹优化控制方法
陈浩 刘月刚 李麒阳 郝欣甫 陈冰冰
Optimal Control Method of Large Curvature Complex Mandrel Weaving Traction Trajectory Based on Offset Compensation Model
CHEN Hao LIU Yuegang LI Qiyang CHI Xinfu CHEN Bingbing
- 92 基于接触区齐次变换的球头铣削力预报与分析
蒋建华 胡腾 王小虎 龚熙裕 张永胜
Prediction and Analysis of Ball-End Milling Force for Cutter-Workpiece Engagement Based on Homogeneous Transformation
JIANG Jianhua HU Teng WANG Xiaohu GONG Xiyu ZHANG Yongsheng
- 99 磨粒间距和材料特性对磨削温度影响的有限元仿真研究
王梦柯 宋飞虎 尹静 吕长飞
Finite Element Simulation of Grinding Temperature Affected by Grain Spacing and Material Characteristics
WANG Mengke SONG Feihu YIN Jing LÜ Changfei
- 105 γ -TiAl合金钎焊用钎料设计及接头组织研究
静永娟 刘焯 尚泳来 李思思 张元伟
Research on Filler Design and Interface Microstructure for Brazing γ -TiAl Alloys
JING Yongjuan LIU Ye SHANG Yonglai LI Sisi ZHANG Yuanwei