附件 2　　浙江水利水电学院“南浔青年学者”申请表

<table>
<tr><td>姓　名</td><td>张晓丽</td><td>出生年月年龄（年龄）</td><td>1989 年 4 月岁（ 34 岁）</td><td>参加工作时间</td><td>2023 年 11 月</td></tr>
<tr><td>现所在单位（部门）</td><td>机械与汽车工程学院</td><td>最高学历/学位</td><td>研究生/博士</td><td>专业技术职务</td><td>讲师</td></tr>
<tr><td>符合条款</td><td colspan="5">符合科研类，SCI top3 论文篇，绩点 150。</td></tr>
<tr><td rowspan="6">所涉业绩</td><td rowspan="2">教学类
绩点：_____</td><td colspan="4"></td></tr>
<tr><td colspan="4"></td></tr>
<tr><td rowspan="2">科研类
绩点：150</td><td colspan="4">Xiao-li Zhang, Si-liang Yan, Miao Meng, Ping Li, Macro-micro behaviors of Ti-22Al-26Nb alloy during warm tension, Materials Science and Engineering A. 2022, 850: 143580 （SCI TOP）</td></tr>
<tr><td colspan="4">Xiao-li Zhang, Si-liang Yan, Miao Meng, Xiaogang Fang, Ping Li, Macro-micro behaviors of Ti-22Al-26Nb alloy under near isothermal electrically-assisted tension, Materials Science and Engineering A. 2023, 864: 144573. （SCI TOP）
Xiao-li Zhang, He Yang, Heng Li, Zhi-yong Zhang, Long Li, Warm bending mechanism of extrados and intrados of large diameter thin-walled CP-Ti tubes, Transactions of Nonferrous Metals Society of China. 2014, 24 (10): 103257-3264.（SCI TOP）</td></tr>
<tr><td rowspan="2">人才称号类
绩点：_____</td><td colspan="4"></td></tr>
<tr><td colspan="4"></td></tr>
<tr><td>总绩点</td><td colspan="4">150</td></tr>
<tr><td colspan="5">备注：请严格按照《浙江水利水电学院“南浔青年学者”实施办法（试行）》（浙水院〔2022〕114 号）附件《业绩成果绩点赋值项目库》的类目、分类、等级（等次）、绩点填写。</td></tr>
<tr><td>个人承诺</td><td colspan="5">本人承诺上述所填内容真实、准确；如有不实，本人承担相应责任。
签名：张晓丽　　时间：</td></tr>
<tr><td colspan="6">以上部分由申请人填写，所在单位审核。以下由单位（部门）和学校填写。</td></tr>
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（部门）意见</td><td colspan="5">1.经审核，申请人所填内容：☐属实　☐不属实；
2.是否符合所申请的类别：☐符合　☐不符合；
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审核意见</td><td colspan="2">负责人签名：　（部门盖章）
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审核意见</td><td colspan="2">负责人签名：　（部门盖章）
____年____月____日</td></tr>
<tr><td>其他相关职能
部门审核意见</td><td colspan="5">负责人签名：　（部门盖章）
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论文收录引用检索报告

检索项目	检索合肥工业大学张晓丽（Zhang XiaoLi）的论文被数据库收录的情况。
检索工具	SCIE（Web of Science）、Science Direct
检索式	根据委托人提供题名检索
检索结果	详见附件清单（3 页）
结论	经检索，合肥工业大学张晓丽（Zhang XiaoLi）发表论文被 SCIE（Web of Science）、Science Direct 收录情况： 2 篇论文被 SCIE 收录； 1 篇论文名为 Macro-micro behaviors of Ti-22Al-26Nb alloy under near isothermal electrically-assisted tension 被 Materials Science and Engineering A 期刊 2023 年第 864 期收录； 具体详见附录。

特此证明。

检索人：石晓昕

合肥工业大学教育部科技查新工作站

2023 年 4 月 20 日

出版商处的全文 导出 添加到标记结果列表 1 / 1

Warm bending mechanism of extrados and intrados of large diameter thin-walled CP-Ti tubes

作者: Zhang, XL (Zhang, Xiao-li) [1] ; Yang, H (Yang, He) [1] ; Li, H (Li, Heng) [1] ; Zhang, ZY (Zhang, Zhi-yong) [1] ; Li, L (Li, Long) [1]

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TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA

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DOI: 10.1016/S1003-6326(14)63465-8
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文献类型: Article

摘要:

In order to develop the warming bending technology of the large diameter thin-walled (LDTW) commercial pure titanium alloy CP-Ti tubes, the warm bending mechanism of the extrados and intrados of LDTW CP-Ti tubes was researched. By EBSD analysis and Vickers hardness test, the changes of microstructure and strength of the tubes at different bending temperatures of 293, 423 and 573 K, were analyzed. The results show: 1) The extrados of the bent tube deforms mainly by slip, along with few twinning, and the preferred orientation is similar to that of the initial tube; the intrados of the bent tube experiences compression deformation mainly by {10 (1) over bar2} tensile twinning, and the twinning makes the preferred orientation of wall materials change sharply. 2) The Vickers hardness values of both the extrados and intrados of the samples after bending increase greatly; the Vickers hardness values of the intrados are much higher than those of the extrados, and Vickers hardness values of the RD-TD planes are always higher than those of the RD-LD planes, which are related to the different deformation mechanisms.

关键词

作者关键词: large diameter thin-walled CP-Ti bent tube; warm bending; texture; twinning; deformation mechanism
Keywords Plus: ROTARY DRAW BENDER; PLASTIC-DEFORMATION; PURE TITANIUM; MICROSTRUCTURE; STRAIN

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类别/分类

研究方向: Metallurgy & Metallurgical Engineering
引文主题: 7 Engineering & Materials Science > 7.12 Metallurgical Engineering > 7.12.595 Springback

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Macro-micro behaviors of Ti-22Al-26Nb alloy during warm tension

作者: Zhang, XL (Zhang, Xiao-li) [1] ; Yan, SL (Yan, Si-liang) [1] , [2] , [3] ; Meng, M (Meng, Miao) [1] ; Li, P (Li, Ping) [1]

MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING

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摘要:

In this paper, the plastic flow rules and fracture evolution mechanisms of the nearly O + B2 Ti-22Al-26Nb alloy during warm tension have been studied within a wide temperature range of 20-800 degrees C. The macro-micro deformation behaviors of the material have been investigated by means of SEM, EBSD and TEM. It is found that the stress-strain curve at 400 degrees C exhibits serrated patterns, indicating the occurrence of dynamic strain aging at mild temperature. The overall yield strength decreases and the uniform elongation increases with the tem-perature in general. However, an unexpected peak of yield strength and also an unexpected valley of uniform elongation are exhibited at 600 degrees C. Additionally, the uniform elongation shows a positive correlation with strain rate at 600 degrees C. With the comprehensive analyses of fracture surface characteristics, the morphological variation of the constituent phases and the dislocation structure evolution, the causations of the above phenomena are further explained as follows. The B2 phase is mainly responsible for deformation coordination between O laths with the original {110}(B2)parallel to{001}(O) orientation barely changed, and act as a media for propagating localized slip deformation to O grains. The abnormal mechanical responses at 600 degrees C are mainly attributed to the change of fracture mode caused by the precipitation of fine acicular O grains, while the softening mechanism at 800 C is mainly dominated by the dynamic globularization of the O phase.

关键词

作者关键词: Macro-micro behaviors; Ti-22Al-26Nb alloy; Warm tension; Fracture mode; Deformation coordination mechanisms
Keywords Plus: LAMELLAR O; MICROSTRUCTURAL EVOLUTION; DEFORMATION MECHANISMS; FRACTURE-TOUGHNESS; ORTHORHOMBIC PHASE; CREEP; B2

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类别/分类

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引文主题: 7 Engineering & Materials Science > 7.12 Metallurgical Engineering > 7.12.665 Titanium Aluminides

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Materials Science and Engineering: A
Volume 864, 7 February 2023, 144573

Macro-micro behaviors of Ti–22Al–26Nb alloy under near isothermal electrically-assisted tension

Xiao-li Zhang [a], Si-liang Yan [a b c], Miao Meng [a], Xiaogang Fang [a], Ping Li [a]

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Highlights

- Near isothermal EA tensile test was designed to rule out thermal effect in EP study.
- EA tension shows greater effect in material softening rather than in plasticity enhancement.
- Portevin Le-Chaterlier effect occurs in EA and TA tension but is suppressed at higher temperatures.
- Dynamic precipitation and globularization of O phase weaken the non-thermal effect of EP.
- The proportion of O→B2 phase transformation increases by over 10 times in EA tension.

Abstract

To reveal the non-thermal effect of electric current in macro-micro behaviors Ti–22Al–26Nb alloy sheet with bimodal initial structure, electrically-assisted (EA) near isothermal tensile tests and thermally-assisted (TA) tensile tests have been conducted comparatively at equivalent temperatures by adjusting the applied current-time curve. The stress responses, morphological evolution of constituent phases and the phase transformation behaviors have been characterized by means of EBSD and TEM. Result shows that EA tension is more effective in reducing deformation resistance, while TA tension plays a more important role in plasticity enhancement. The overall electrically-induced stress drop in EA tension increases monotonically with current density, but its non-thermal component first decreases with current density and then increases significantly from the critical value of 12.40A/mm^2 in EA tension. The variation of the non-thermal stress drop during EA deformation is attributed to the competition between softening effect and strengthening effect of the electric current, viz. electric current causes softening effect by activating dislocation slip and inducing dislocation annihilation on one hand, and the electrically-driven dynamic precipitation of nanoscale O laths and dynamic globularization of O lamellae leads to additional strengthening effect on the other hand. Moreover, electric current promotes the process of O→B2 phase transformation from both thermodynamic and kinetic at 16.01–20.87 A/mm^2.

Previous Next

Keywords

Macro-micro behaviors; Ti–22Al–26Nb alloy; Electrically-assisted (EA) near isothermal tension; Deformation coordination mechanisms

1. Introduction