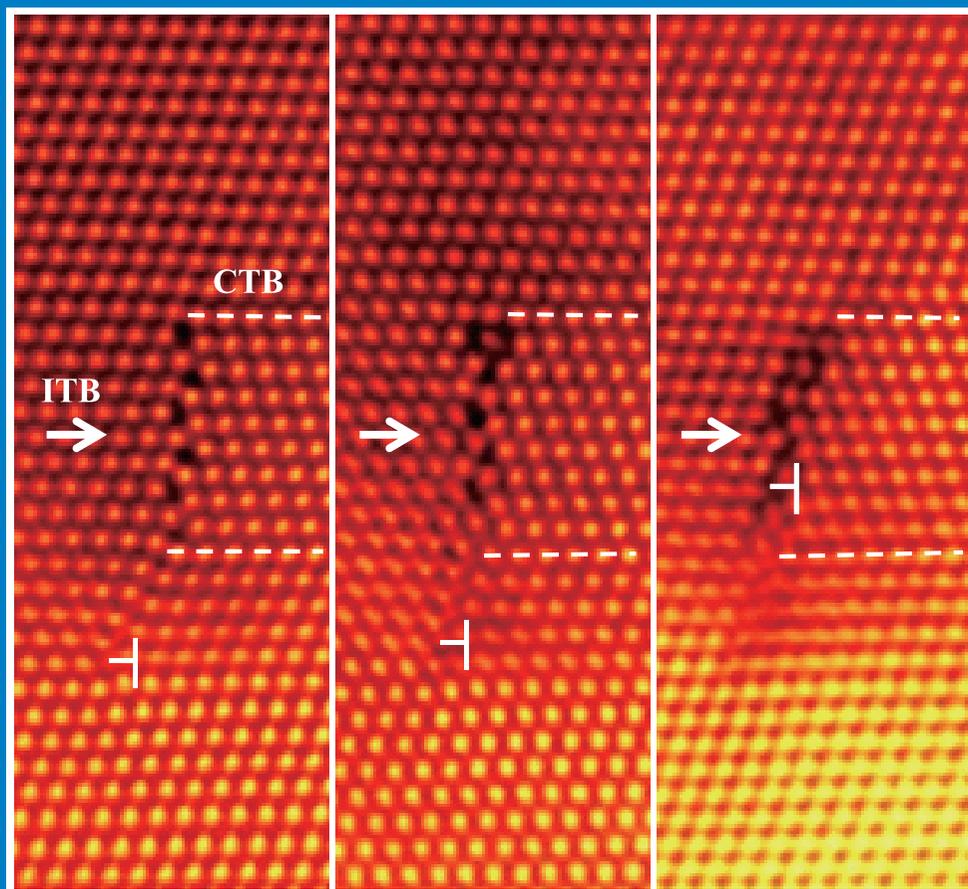


电子显微学报

Journal of Chinese Electron Microscopy Society



贺电子显微学报创刊四十周年专刊二

第41卷 第5期
 Vol.41 No.5
 (总第223期)

2022

ISSN 1000-6281



9 771000 628228

中国物理学会 主办

电 子 显 微 学 报

第 41 卷 第 5 期 2022 年

目 次

[研究论文]

- 镍基单晶高温合金疲劳行为的原位透射电镜研究 易涛, 赵治宇, 韦华, 张跃飞, 王江伟, 张泽(473)
- CoCrNi 多组元合金退火硬化现象的微观机制 程清, 徐先东, 谢盼, 陈江华(481)
- Ni 基单晶高温合金中 γ' 粗化行为的电子显微学研究 周慧, 龙海波, 毛圣成, 张泽, 韩晓东(491)
- γ' 相的尺寸梯度对富钴镍基高温合金变形机制的影响 齐东卿, 赵鹏, 崔传勇, 叶恒强, 杜奎(499)
- 镍基单晶高温合金孔洞区域蠕变行为原位 SEM 研究 何文玲, 吕俊霞, 程晓鹏, 王晋, 张跃飞, 张泽(507)
- β 钛合金表面渗氧强化机理研究 王秀群, 韩卫忠, 单智伟(515)
- 铁性氧化物界面应变耦合诱导极化拓扑结构 唐云龙, 王宇佳, 朱银莲, 马秀良(520)
- 核壳结构的 Cu/NiO 和 Cu/Cu₂O 纳米线的等离激元研究 沈希, 王晓, 姚媛, 孙静, 禹日成(528)
- 热致偏析构筑自适应垂直异质结 刘素贞, 唐云龙, 朱银莲, 曹毅, 刘楠, 刘嘉琦, 姜如建, 王靖辉, 马秀良(535)
- 直接激光沉积 Ti6Al4V 合金疲劳裂纹萌生原位研究 谢强, 吕俊霞, 周建力, 程晓鹏, 王晋, 张跃飞, 张泽(542)
- 氧化镁等离激元与价电子激发纳米分辨 STEM-EELS 研究 杜进隆, 赵娜, 时若晨, 李跃辉, 张敬民, 徐军, 高鹏(550)
- Sn_{1.03-x}Mn_x(Cu₂Te)_{0.05} 中缺陷结构的电子显微学研究 杨晓玉, 南鹏飞, 梁智尧, 程礼迅, 刘杨瑞, 郭思齐, 葛炳辉(556)
- 高强度 Al-Zn-Mg-Cu 合金等通道角挤压后的微观结构研究 应向荣, 江彬彬, 叶恒强, 杜奎(564)
- 石墨烯纳米泡的充电态操控 马传许, 杜宏健, 田明阳, 王巨丰, 王兵(571)

封面图选自:2022 年第 4 期“单晶 Pt 中位错与非共格孪晶界反应的原位原子尺度观察”一文

责任编辑 李宁春

校 对 许芬秀

JOURNAL OF CHINESE ELECTRON MICROSCOPY SOCIETY

Vol.41 No.5 2022

CONTENTS

[Research paper]

- Fatigue behavior of Ni-based single crystal superalloy based on *in-situ* TEM study
..... *YI Tao, ZHAO Zhi-yu, WEI Hua, ZHANG Yue-fei, WANG Jiang-wei, ZHANG Ze* (473)
- Mechanism of anneal hardening in CoCrNi multi-principal elemental alloys
..... *CHENG Qing, XU Xian-dong, XIE Pan, CHEN Jiang-hua* (481)
- Electron microscopic study on the coarsening behavior of γ' in Ni-based single crystal superalloy
..... *ZHOU Hui, LONG Hai-bo, MAO Sheng-cheng, ZHANG Ze, HAN Xiao-dong* (491)
- Size gradient of γ' phase impacting on deformation mechanism of cobalt-rich nickel-based superalloy
..... *QI Dong-qing, ZHAO Peng, CUI Chuan-yong, YE Heng-qiang, DU Kui* (499)
- In-situ* SEM study on creep behavior in hole region of nickel-based single crystal superalloy
..... *HE Wen-ling, LÜ Jun-xia, CHENG Xiao-peng, WANG Jin, ZHANG Yue-fei, ZHANG Ze* (507)
- Hardening mechanism of surface oxygen-charging in β titanium alloy
..... *WANG Xiu-qun, HAN Wei-zhong, SHAN Zhi-wei* (515)
- Strain mediated topological polarization structures in ferroic films with coherent interface
..... *TANG Yun-long, WANG Yu-jia, ZHU Yin-lian, MA Xiu-liang* (520)
- The surface and volume plasmons study of Cu(core)NiO(shell) and Cu(core) Cu₂O(shell) nanowires
..... *SHEN Xi, WANG Xiao, YAO Yuan, SUN Jing, YU Ri-cheng* (528)
- Architecting adaptive vertical heterojunction by thermal segregation *LIU Su-zhen, TANG Yun-long,*
ZHU Yin-lian, CAO Yi, LIU Nan, LIU Jia-qi, JIANG Ru-jian, WANG Jing-hui, MA Xiu-liang (535)
- In-situ* study on fatigue crack initiation of direct laser deposition Ti6Al4V alloy *XIE Qiang,*
LÜ Jun-xia, ZHOU Jian-li, CHENG Xiao-peng, WANG Jin, ZHANG Yue-fei, ZHANG Ze (542)
- Valence electron excitations and plasmon of MgO via STEM-EELS
..... *DU Jin-long, ZHAO Na, SHI Ruo-chen, LI Yue-hui, ZHANG Jing-ming, XU Jun, GAO Peng* (550)
- Study of defects in Sn_{1.03-x}Mn_x(Cu₂Te)_{0.05} by electron microscopy *YANG Xiao-yu,*
NAN Peng-fei, LIANG Zhi-yao, CHENG Li-xun, LIU Yang-rui, GUO Si-qi, GE Bing-hui (556)
- Microstructural characterization of high strength Al-Zn-Mg-Cu alloy processed by equal channel angular
pressing *YING Xiang-rong, JIANG Bin-bin, YE Heng-qiang, DU Kui* (564)
- Manipulating charge states of single-layer graphene nanobubbles
..... *MA Chuan-xu, DU Hong-jian, TIAN Ming-yang, WANG Ju-feng, WANG Bing* (571)