

电子显微学报

第38卷 第5期 2019年

目 次

贺新中国成立70周年专辑序言	张泽(序言)
[研究论文]	
单晶Pt裂纹前端位错行为的原位原子尺度观察	郭谊忠,王立华,张泽,韩晓东(429)
低维材料原子尺度动态结构演变	郑赫,曹凡,胡帅帅,孟爽,李雷,刘辉辉,贾双凤,王建波(436)
二硫化锡纳米片的原位辐照与热稳定性研究	辛磊,李京仓,熊雨薇,文一峰,朱明芸,尹奎波,孙立涛(445)
TWIP高熵合金中塑性变形机理的原位电镜研究	符晓倩,余倩,张泽(452)
立方碳化硅薄膜的层错结构特征	闫学习,姚婷婷,陶昂,杨兵,陈春林,马秀良,叶恒强(459)
电子束辐照下LaCoO ₃ /LaMnO ₃ 多层膜的结构演化	管翔翔,沈希,张静,姚漫,孙继荣,禹日成(464)
应变对铁酸铋薄膜结构畸变特性的影响	韩梦娇,朱银莲,唐云龙,王宇佳,郭相伟,马秀良(470)
半赫斯勒合金Nb _{0.8+δ} CoSb中空位调节有序度的电子显微学研究	南鹏飞,杨丽霞,王玉梅,夏凯阳,朱铁军,葛炳辉(477)
Cu掺杂及应变加载对单根SnSe微米线电学性能影响的研究	郑云志,苑华磊,郑坤,史晓磊,陈志刚,邹进(483)
可降解Zn合金在室温单轴压缩下的微观组织演变	毛成明,杨宏韬,陈厚文,郑玉峰,聂建峰(490)
Mg-Y合金中共轴{1121}孪晶交互的电子显微研究	毕建军,刘翠秀,李万鹏,孙威(496)
成像参数对ADF STEM三维重构成像精确性的影响	明文全,陈江华,沈若涵,何玉涛,陈志远(502)
单颗粒链CoFe ₂ O ₄ 纳米纤维磁结构的电子全息研究及磁化翻转机制	曾雪,张军伟,邓霞,张宏,屈可,彭勇(512)
二维材料中电荷转移问题的密度泛函模拟与叠层成像研究	魏一凡,裴旭东,高斯,周健,张会刚,王鹏(519)
拓扑半金属AuTeBr,YbMnBi ₂ 和ZrSiSe的原子尺度表面形貌研究	孙蔚策,朱朕,郑浩,贾金锋(526)
植物病毒粒子在寄主细胞中的原位聚集特征	张仲凯,郑宽瑜,王田田,吴少政,裴卫华(531)
[综述]	
膜微区相关结构模型及甾醇成像技术的研究进展	董紫怡,宋程威,崔亚宁,王猛,李瑞丽,林金星(542)
单颗粒冷冻电镜技术在核糖体抗生素耐药机理研究中的应用	王婧芬,华孝挺,张小东,吴航军,张兴,俞云松,吴永平(550)
原位电子显微学方法在材料研究中的应用	翁素婷,张庆华,谷林(556)
层状金属结构材料原子尺度界面结构与性能	曾帅,郑士建,马秀良(569)
书评	
显微镜辅助观察关节脱位的病理变化	侯威,向亮,张卫(i)
电子显微镜在职业医学心理健康的运用	唐英(ii)
显微镜在电动汽车动力匹配与整体优化中运用	韦丽珍(iii)
心脏电子装置植入术后的感染因素分析及护理	黄冰冰,冉敏(iv)
显微镜直视下视网膜脱离复位手术的临床观察	王彬,李清明,覃雪,曾丽芳(v)
腹腔镜手术治疗小儿腹股沟斜疝的疗效与护理	陈慧萍,蔡丹(vi)
子宫肌瘤微创术综合护理干预效果分析	陈琳(vii)
手部皮肤逆行套状撕脱伤的显微修复临床研究	陈贤明,张森,王子明(viii)

封面图选自本期“单晶Pt裂纹前端位错行为的原位原子尺度观察”一文

责任编辑 李宁春

校 对 许芬秀

期刊基本参数:CN 11-2295/TN * 1982 * b * A4 * 152 * zh * P * ¥ 60 * 20 * 2019-10

JOURNAL OF CHINESE ELECTRON MICROSCOPY SOCIETY

Vol.38 No.5 2019

CONTENTS

Foreword to the issue for "The 70th Anniversary of People's Republic of China"	ZHANG Ze (Preface)
[Research paper]	
In situ atomic-scale observation of dislocation behaviors at front of crack tip in single-crystal Pt	GUO Yi-zhong, WANG Li-hua, ZHANG Ze, HAN Xiao-dong (429)
Atomistic insights into the dynamic structural evolutions in low-dimensional materials	ZHENG He, CAO Fan, HU Shuai-shuai, MENG Shuang, LI Lei, LIU Hui-hui, JIA Shuang-feng, WANG Jian-bo (436)
In situ irradiation and thermal stability study of tin disulfide nanosheets	XIN Lei, LI Jing-cang, XIONG Yu-wei, WEN Yi-feng, ZHU Ming-yun, YIN Kui-bo, SUN Li-tao (445)
In situ investigation on deformation mechanism of twinning-induced plasticity high-entropy alloy	FU Xiao-qian, YU Qian, ZHANG Ze (452)
Structural feature of the stacking faults in cubic SiC films	YAN Xue-xi, YAO Ting-ting, TAO Ang, YANG Bing, CHEN Chun-lin, MA Xiu-liang, YE Heng-qiang (459)
Structural evolution of LaCo ₃ /LaMnO ₃ multilayers under electron beam irradiation	GUAN Xing-xiang, SHEN Xi, ZHANG Jing, YAO Yuan, SUN Ji-rong, YU Ri-cheng (464)
Impact of strains on structural distortions in bismuth ferrite films	HAN Meng-jiao, ZHU Yin-lian, TANG Yun-long, WANG Yu-jia, GUO Xiang-wei, MA Xiu-liang (470)
Study of vacancy-induced ordering transformation in half Heusler alloy NbCoSb by electron microscopy	NAN Peng-fei, YANG Li-xia, WANG Yu-mei, XIA Kai-yang, ZHU Tie-jun, GE Bing-hui (477)
Effect of Cu doping and strain loading on electrical properties of single SnSe microwires	ZHENG Yun-zhi, YUAN Hua-lei, ZHENG Kun, SHI Xiao-lei, CHEN Zhi-gang, ZOU Jin (483)
Microstructure evolution of biodegradable zinc alloys during uniaxial compression at room temperature	MAO Cheng-ming, YANG Hong-tao, CHEN Hou-wen, ZHENG Yu-feng, NIE Jian-feng (490)
TEM study of the co-zone {1121} twinning interaction in Mg-Y alloy	BI Jian-jun, LIU Cui-xiu, LI Wan-peng, SUN Wei (496)
Influence of imaging parameters on the accuracy of three-dimensional electron tomography by ADF STEM images	MING Wen-quan, CHEN Jiang-hua, SHEN Ruo-han, HE Yu-tao, CHEN Zhi-kui (502)
Magnetic structure of single-particle-chain CoFe ₂ O ₄ nanofibre directly imaged by off-axis electron holography and its magnetic reversal mechanism	ZENG Xue, ZHANG Jun-wei, DENG Xia, ZHANG Hong, QU Ke, PENG Yong (512)
Ptychographic image simulation of charge transfer in 2D materials based on DFT approach	WEI Yi-fan, PEI Xu-dong, GAO Si, ZHOU Jian, ZHANG Hui-gang, WANG Peng (519)
Surface morphology of semimetals AuTe ₂ Br, YbMnBi ₂ and ZrSiSe at atomic scale	SUN Ji-ce, ZHU Zhen, ZHENG Hao, JIA Jin-feng (526)
Plant virions <i>in situ</i> aggregated characterization in the host cells	ZHANG Zhong-kai, ZHENG Kuan-yu, WANG Tian-tian, WU Shao-zheng, PEI Wei-hua (531)
[Review]	
Structural models of membranemicrodomains and sterol imaging technology	DONG Zi-yi, SONG Cheng-wei, CUI Ya-ning, YU Meng, LI Rui-li, LIN Jin-xing (542)
Prospect of single-particle cryo-electron microscopy in revealing mechanisms of ribosomal antibiotics resistance	WANG Jing-fen, HUA Xiao-ting, ZHANG Xiao-dong, WU Hang-jun, ZHANG Xing, YU Yun-song, WU Yong-ping (550)
Application of <i>in situ</i> electron microscopy in materials research	WENG Su-ting, ZHANG Qing-hua, GU Lin (556)
Atomistic scale interfacial structure and properties of layered metal structural materials	ZENG Shuai, ZHENG Shi-jian, MA Xiu-liang (569)
* Book review *	
Microscopic-assisted observation of pathological changes of joint dislocation	HOU Wei, XIANG Liang, ZHANG Wei (i)
Application of electron microscope in psychological health of occupational medicine	TANG Ying (ii)
Application of microscope in power matching and integral optimization of electric vehicle	WEI Li-zhen (iii)
Analysis of infection factors and nursing after implantation of cardiac electronic devices	HUANG Bing-bing, RAN Min (iv)
Clinical observation of retinal detachment reduction under microscope	WANG Bin, LI Qing-ming, TAN Xue, ZENG Li-fang (v)
Curative effect and nursing of laparoscopic operation for indirect inguinal hernia in children	CHEN Hui-ping, CAI Dan (vi)
Analysis of the effect of comprehensive nursing intervention in minimally invasive hysteromyoma surgery	CHEN Lin (vii)
Clinical study on microsurgical repair of retrograde nest avulsion of hand skin	CHEN Xian-ming, ZHANG Sen, WANG Zi-ming (viii)