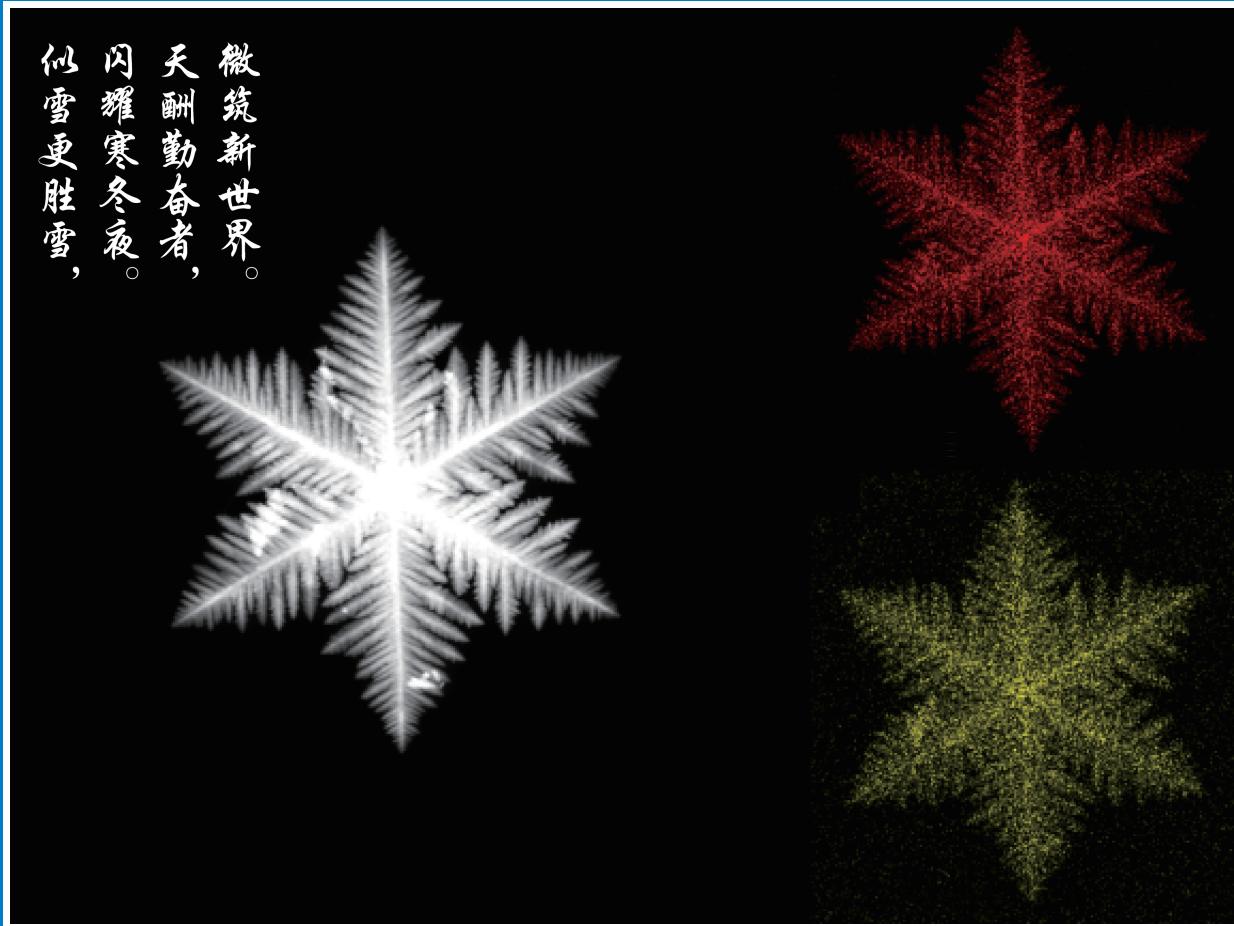


ISSN 1000-6281

电子显微学报

# 电子显微学報

Journal of Chinese Electron Microscopy Society



第38卷 第6期  
Vol.38 No.6  
(总第206期)

2019

ISSN 1000-6281



中国物理学会 主办

万方数据

一〇一九年

J. Chinese EM Soc. Vol. 38 No. 6

# 电子显微学报

第38卷 第6期 2019年(卷终)

## 目 次

### [研究论文]

- 多铁材料 BiFeO<sub>3</sub>薄膜中失配压应变导致的界面重构 ..... 耿婉荣,朱银莲,唐云龙,马秀良(579)  
有机无机掺杂钙钛矿太阳能电池界面的光氧失稳机理研究 ..... 葛杨,卢岳,隋曼龄(585)  
碳纳米纤维储钠机制的原位透射电镜研究 ..... 皇甫磊磊,瞿阿敏,田鹤,张泽(593)  
电子束诱导 WO<sub>2.72</sub>单晶生长与还原 ..... 王严,文广玉,李雷,刘辉辉,彭华雨,蒋仁辉,庄园林,贾双凤,郑赫,王建波(600)  
使用会聚束电子衍射技术测定 Ni-Al 二元模型单晶高温合金  $\gamma/\gamma'$  两相错配度 ..... 张博文,张晓娜,刘程鹏,于涛,李晖,王崇愚,张泽(608)  
不同维度 ZnO 纳米材料的生长与表征 ..... 彭胜,赵培丽,李雷,张莹,蒋仁辉,吴江兵,王正洲,贾双凤,郑赫,王建波(615)  
形变时效对 Al-2.4Cu-0.9Li-0.7Mg 合金的显微组织和力学性能的影响 ..... 邹富强,李石勇,伍翠兰,巩向鹏,罗世芳,周琳(623)  
冷轧变形量对 Mn12Ni2MoTi(Al) 钢层状双相结构的影响 ..... 张香阁,伍翠兰,沈书成,朱恺(632)  
纯水和棕榈酸体系中 Mg<sup>2+</sup>/Sr<sup>2+</sup> 对碳酸钙结晶行为的影响 ..... 唐何娜,杨磊,刘艳茹,陈进(639)  
超高压榴辉岩中金红石的地球化学特征分析——以丁叉叉山钛矿为例 ..... 刘创脱,王丰翔,崔邢涛,王佳(650)  
河南鲁山新元古界罗圈组石英颗粒形态特征及意义 ..... 张碧云,郑德顺(657)  
2015 年北京冬季大气 PM<sub>2.5</sub> 的显微形貌及成分演变的扫描电镜分析 ..... 齐瑞娟,邵雪峰,黄荣(664)  
长白山 6 种橐吾花粉形态扫描电镜观察 ..... 瞿小杰,董然(673)  
玉带凤蝶成虫触角感器的扫描电镜观察 ..... 汪洋,周琼,崔中翌,李幸(678)

### [实验技术与方法]

- 一种碳量子点透射电子显微镜的样品制备方法 ..... 刘志昂,谭青青,渠凤丽(685)

### [综述]

- 双模原子力显微术的纳米力学测量原理及其应用 ..... 毕篆芳,商广义(689)

### \*书评\*

- 显微镜在法医病理学领域中的应用 ..... 刘泉( i )  
原子力显微术视域下足球发球技巧分析 ..... 罗智敏( ii )  
中医药大学显微镜设备与高等教育管理研究 ..... 孙立,宿哲骞( iii )  
电子显微镜中原位外场加载下半导体纳米材料结构演变研究 ..... 杨英,岳远霞( iv )  
显微镜结合生物反馈电刺激治疗产后盆底疼痛感研究 ..... 邓翠艳,刘春花,高承香( v )  
显微手外科围手术期病人的护理思考 ..... 秦淑英( vi )  
耳穴埋豆结合音乐疗法在妇科腹腔镜手术中的应用 ..... 刘静,田娟,赵青,张菲菲,李玉芳,葛军( vii )  
手术室人文关怀对前置胎盘剖宫产患者宫腔镜手术的应用 ..... 杨会义,张菲菲,王赛,葛军( viii )  
电子显微学报 第38卷(2019年)总目次 ..... ( I - IX )

封面图选自 2019 年第十届“中国电子显微摄影大赛”(优秀奖) ..... 张斌,魏锡钧(656)

责任编辑 李宁春  
校 对 许芬秀

# JOURNAL OF CHINESE ELECTRON MICROSCOPY SOCIETY

Vol.38 No.6 2019 (The end)

## CONTENTS

### [Research paper]

- The interface reconstruction induced by compressive strain in multiferroic BiFeO<sub>3</sub> films ..... GENG Wan-rong, ZHU Yin-lian, TANG Yun-long, MA Xiu-liang(579)  
Photo-oxidative instability mechanism of organic-inorganic hybridized perovskite solar cell interface ..... GE Yang, LU Yue, SUI Man-ling(585)  
*In situ* TEM study on mechanism of sodium storage in carbon nanofibers ..... HUANGFU Lei-lei, ZHAI A-min, TIAN He, ZHANG Ze(593)  
Electron-beam-induced growth and reduction of WO<sub>2.72</sub> single crystal ..... WANG Yan, WEN Guang-yu, LI Lei, LIU Hui-hui, PENG Hua-yu, JIANG Ren-hui, ZHANG Yuan-lin, JIA Shuang-feng, ZHENG He, WANG Jian-bo(600)  
Determination of the crystal lattice misfit in Ni-Al binary single crystal model superalloy by convergent beam electron diffraction ..... ZHANG Bo-wen, ZHANG Xiao-na, LIU Cheng-peng, YU Tao, LI Hui, WANG Chong-yu, ZHANG Ze(608)  
Growth and characterization of ZnO nanomaterials with different dimensions ..... PENG Sheng, ZHAO Pei-li, LI Lei, ZHANG Ying, JIANG Ren-hui, WU Jiang-bing, WANG Zheng-zhou, JIA Shuang-feng, ZHENG He, WANG Jian-bo(615)  
Effects of thermo-mechanical treatment on the microstructure and mechanical properties of Al-2.4Cu-0.9Li-0.7Mg alloy ..... ZOU Fu-qiang, LI Shi-yong, WU Cui-lan, GONG Xiang-peng, LUO Shi-fang, ZHOU Lin(623)  
Effect of cold rolled reduction on microstructure and tensile properties of Mn12Ni2MoTi(Al) steel ..... ZHANG Xiang-ge, WU Cui-lan, SHEN Shu-cheng, ZHU Kai(632)  
Effect of Mg<sup>2+</sup>/Sr<sup>2+</sup> on crystallization behavior of calcium carbonate in pure water and palmitic acid system ..... TANG He-na, YANG Lei, LIU Yan-ru, CHEN Jin(639)  
Geochemical analysis of rutile in UHP eclogite: taking the Dingchachashan titanium mine as an example ..... LIU Chuang-tuo, WANG Feng-xiang, CUI Xing-tao, WANG Jia(650)  
Morphological characteristics of quartz grains in the Luoquan formation of the Neoproterozoic in Lushan, Henan province ..... ZHANG Bi-yun, ZHENG De-shun(657)  
SEM analysis of microstructure and composition evolution of PM<sub>2.5</sub> in the winter of Beijing in 2015 ..... QI Rui-juan, SHAO Xue-feng, HUANG Rong(664)  
SEM observation on pollen morphology of six *Ligularia* in Changbai Mountain ..... QU Xiao-jie, DONG Ran(673)  
SEM observation on the antennae sensilla of adult *Papilio papili* ..... WANG Yang, ZHOU Qiong, CUI Zhong-yi, LI Xing(678)

### [Experiment technology and method]

- A sample preparation for transmission electron microscope of carbon quantum dots ..... LIU Zhi-ang, TAN Qing-qing, QU Feng-li(685)

### [Review]

- The principle and applications of nanomechanical measurement of bimodal AFM ..... BI Zhan-fang, SHANG Guang-yi(689)

### \* Book review \*

- The application of microscope in the field of forensic pathology ..... LIU Quan( i )  
Analysis of serving skill of football from the perspective of atomic force microscopy ..... LUO Zhi-min( ii )  
Research on microscope equipment and higher education management of University of traditional Chinese medicine ..... SUN Li, SU Zhe-qian( iii )  
Study on the structure evolution of semiconductor nanomaterials under field loading ..... YANG Ying, YUE Yuan-xia( iv )  
Study on the treatment of postpartum pelvic pain with microscope and biofeedback electric stimulation ..... DENG Cui-yan, LIU Chun-hua, GAO Cheng-xiang( v )  
Nursing of patients in perioperative period of microsurgery ..... QIN Shu-ying( vi )  
The application of ear point burying beans combined with music therapy in gynecological laparoscopic surgery ..... LIU Jing, TIAN Juan, ZHAO Qing, ZHANG Fei-fei, LI Yu-fang, GE Jun( vii )  
Application of humanistic care in operating room for hysteroscopic operation of patients with placenta previa undergoing cesarean section ..... YANG Hui-yi, ZHANG Fei-fei, WANG Sai, GE Jun( viii )