

FA.两岸三地新材料论坛

分会主席：王荣明、黄陟峰、郑子剑、阙郁伦

单元 FA-1：7月13日上午

主持人：王荣明，黄陟峰

地点：会议中心酒店-海棠厅

08:20-08:40 FA-01

分会开幕暨中国材料研究学会纳米材料与器件分会简介

王荣明

北京科技大学

08:40-09:00 FA-02

Chemical Synthesis and Theranostic Applications of Magnetic Iron Carbide Nanoparticles

侯仰龙

北京大学

09:00-09:20 FA-03

Asymmetric Synthesis: the Methods and Applications

车顺爱

同济大学

09:20-09:40 FA-04

Oxide Heteroepitaxy for Soft Technology

朱英豪

台湾交通大学

09:40-10:00 FA-05

Adjustable Thermal Expansion in $\text{La}(\text{Fe}, \text{Si}, \text{Co})_{13}/\text{Cu}$ Conductive Composites by High-Pressure Synthesis

李来凤

中国科学院理化技术研究所

10:00-10:20 FA-06

Quantum Dots based Photocatalysts for Efficient Hydrogen Evolution

张铁锐

中国科学院理化技术研究所

10:20-10:40 茶歇

10:40-11:00 FA-07

Excellent Electronic Properties and Oxidation Resistance of 2D Group-III and Group-IV Monochalcogenides

赵纪军

大连理工大学

11:00-11:20 FA-08

Extraordinarily Strong Interlayer Interaction and High-Electron-Mobility in 2D Layered PtX_2

柴扬

香港理工大学

11:20-11:40 FA-09

Low-Temperature Growth of Transition Metal Dichalcogenides (TMDs) Layered Materials Toward Phase-Engineered Hybrid Films

阙郁伦

台湾清华大学

11:40-12:00 FA-10

石墨烯功能组装材料在能源与环境领域前沿应用的一些例子

曲良体

北京理工大学

单元 FA-2：7月13日下午

主持人：郑子剑，阙郁伦

地点：会议中心酒店-海棠厅

13:30-14:00 FA-11 (Keynote)

Recent Progress in Structural Nano Materials and Potentials for Lightweight Applications

吕坚

香港城市大学

14:00-14:20 FA-12

钠离子电池：从结构设计到性能优化

余彦

中国科学技术大学

14:20-14:40 FA-13

Cost-effective and Scalable Manufacturing of Metal-mesh Transparent Electrodes for Flexible Applications

李文迪

香港大学

14:40-15:00 FA-14

2D Materials in Energy and Environmental Applications: Piezocatalysis and Water Splitting

吴志明

台湾清华大学

15:00-15:20 FA-15

储能材料热力学调控与传感器研究

孙立贤

桂林电子科技大学

15:20-15:50 茶歇

15:50-16:10 FA-16

Bio-Inspired Synthesis and Self-Assembly of Functional Materials

俞书宏

中国科学技术大学

16:10-16:30 FA-17

生物相容材料构建的细胞外纳米基质用于神经干细胞在有限使用生长因子条件下的增殖和分化

翁建霖

香港浸会大学

16:30-16:50 FA-18

Interface Engineering of Optoelectronic Devices Based on Graphene-Like Materials

许建斌

香港中文大学

16:50-17:10 FA-19

Engineering Atomic-size Spin Defects in Diamond for Quantum-Enhanced Biosensing

褚智勤

香港中文大学

17:10-17:30 FA-20

Growth and Physical Property of Semiconductor Nanowires

周苡嘉

台湾交通大学

17:30-17:50 FA-21

Novel Functional Dendritic Polymer Materials

梁湛辉

香港浸会大学

单元 FA-3：7月14日上午

主持人：范智勇，何颂贤

地点：会议中心酒店-海棠厅

08:20-08:40 FA-22

Design and Preparation of High Energy Density Dielectric Capacitors: From Bulk to Thin Film

林元华

清华大学

08:40-09:00 FA-23
Progress and Prospects of GaN-based VCSEL from Near UV to Green Emission

郭浩中
台湾交通大学

09:00-09:20 FA-24
Polar and Nonpolar ZnO Nanostructured Films for Functional Sensor Devices

魏大华
台北科技大学

09:20-09:40 FA-25
新型二维磁性 CrO_x 与 Cr₂C 半导体材料的第一性原理研究

孙志梅
北京航空航天大学

09:40-10:00 FA-26
Ambipolar Organic Field-effect Transistors based on Dual-function, Ultra-thin and Highly Crystallized 2,9-didecyldinaphtho[2,3-b:2',3'-f]thieno[3,2-b]thiophene (C₁₀-DNTT) Layer

陈国梁
香港大学

10:00-10:20 FA-27
Smart Materials and Devices Driven by a Metal-Insulator Phase Transition

刘锴
清华大学

10:20-10:40 茶歇

10:40-11:00 FA-28
稀土离子掺杂玻璃上转换发光特性

肖志松
北京航空航天大学

11:00-11:20 FA-29
Photoelectrochemical and Self-Powered ZnO/Cu₂O Biosensor

王祥辰
台湾中正大学

11:20-11:40 FA-30
功能材料的纳米力学行为

陆洋
香港城市大学

11:40-12:00 FA-31
Application of Modern TEM on Novel Functional Materials

朱叶
香港理工大学

单元 FA-4: 7月14日下午
主持人: 严锋, 郑南峰
地点: 会议中心酒店-海棠厅

13:20-13:50 FA-32 (Keynote)
Designing Nano-Arrays for SERS-based Rapid Detection of Trace POPs

孟国文
中国科学院合肥物质科学研究院

13:50-14:10 FA-33
Phase Transition and Solid Refrigeration Materials

胡凤霞
中国科学院物理研究所

14:10-14:30 FA-34
Optical Management of Solution-processed Silicon-nanowire based Optoelectronic Devices

陈嘉匀
台湾成功大学

14:30-14:50 FA-35

Semiconductor Nanoheterostructures for Photoconversion Applications

徐雍莹
台湾交通大学

14:50-15:10 FA-36
Upconversion-based All-optical Optogenetics

史鹏
香港城市大学

15:10-15:30 FA-37
Solution Process Organic Semiconductors in Printable Solar Photovoltaic Devices

李刚
香港理工大学

15:30-15:50 茶歇

15:50-16:10 FA-38
The Multi-scale Structured Anode Materials for Lithium Ion Batteries

朱敏
华南理工大学

16:10-16:30 FA-39
Construction of Carbon Interface for Electrical Energy Storage

朱彦武
中国科学技术大学

16:30-16:50 FA-40
Nanoscale p- and n-type Field-Effect Devices of P3HT and ZTO Nanowires

简纹滨
台湾交通大学

16:50-17:10 FA-41
Two-Dimensional Metal Chalcogenide Semiconductors: Design, Synthesis and Applications

何军
国家纳米科学中心

17:10-17:30 FA-42
Ferroelectric Domain Wall Memory in Hierarchical Domain Pattern and Huge Readout Wall Current

江安全
复旦大学

17:30-17:50 FA-43
反钙钛矿化合物 Mn₃XN(C)的“晶格-自旋”强关联及其负/零热膨胀行为研究

王聪
北京航空航天大学

单元 FA-5: 7月15日上午
主持人: 黄陟峰, 俞书宏
地点: 会议中心酒店-海棠厅

08:20-08:40 FA-44
基于纳米结构的光电器件

范智勇
香港科技大学

08:40-09:00 FA-45
Interplay of Ferroelectric Order and Itinerant Electrons in LiOsO₃

张清明
中国人民大学

09:00-09:20 FA-46
Spatial Distribution of the Degree of Crystallinity in Polymer Films

李寒莹
浙江大学

09:20-09:40 FA-47

Strain Modulation to Ultrathin Ferroelectric Tunnel Junction Memory

戴吉岩
香港理工大学

09:40-10:00 FA-48

Additive Manufacturing Porous Ti-6Al-4V Fusion Cage Investigations: Multi-scale Investigation for Biological Apatite Crystallites in Bone Remodeling and Mineralization

黄尔文
台湾交通大学

10:00-10:20 FA-49

Femtosecond Laser-Colorized Indium-Tin-Oxide Films for Blue Light Attenuation and Image Screening

罗志伟
台湾交通大学

10:20-10:40 茶歇

10:40-11:00 FA-50

Surface Coordination Chemistry of Metal Nanomaterials

郑南峰
厦门大学

11:00-11:20 FA-51

Functional Mesoporous Materials Templated by Block Copolymers

郭绍伟
台湾中山大学

11:20-11:40 FA-52

Doped Semiconductor Nanocrystals and Their Hetero-structures

张加涛
北京理工大学

11:40-12:00 FA-53

Free-standing Planar Thermoelectric Microrefrigerators based on Nano-grained SiGe Thin Films

黄宝陵
香港科技大学

单元 FA-6: 7月15日下午

主持人: 王荣明, 郑子剑
地点: 会议中心酒店-海棠厅

13:30-14:00 FA-54 (Keynote)

金属-有机框架催化材料的构筑和性能

曹荣
中国科学院福建物质结构研究所

14:00-14:20 FA-55

Polymer-Assisted Metal Deposition for Soft Electronics

郑子剑
香港理工大学

14:20-14:40 FA-56

上转换纳米晶中浓度猝灭问题的研究

王锋
香港城市大学

14:40-15:00 FA-57

Morphology of Fused Ring Electron Acceptors and Their Applications

路新慧
香港中文大学

15:00-15:20 FA-58

The Application of Material Analysis on IC Industry

陈荣钦
MSSCORPS CO., LTD. 汎銓科技

15:20-15:50 茶歇

15:50-16:10 FA-59

The Application of 2-D Materials in Organic or Hybrid Solar Cells

严锋
香港理工大学

16:10-16:30 FA-60

晶圆级单层硫化钨及其在高性能柔性光电探测器中的应用

何颂贤
香港城市大学

16:30-16:45 FA-61

原子层沉积技术制备新型纳米薄膜材料

王新炜
北京大学深圳研究生院

16:45-17:00 FA-62

导电聚合物/碳纳米管或石墨烯复合热电材料

陈光明
中国科学院化学研究所

17:00-17:15 FA-63

Optical Properties of Chiral Plasmonic Nanoparticles

刘俊俊
香港浸会大学

17:15-17:30 FA-64

Phase Selection During Solidification of Colloidal Suspensions

游家学
西北工业大学

17:30-17:45 FA-65

New Rare-Earth Metal Germanides with Two-dimensional Germanium Network Modulation Structure

张吉亮
香港城市大学

17:45-18:00 闭幕暨优秀墙报颁奖

墙展

FA-P01

Evolution of Local Strain at MoS₂-metal Boundaries: the Effect of Substrate Interaction

Moe Yan Aung, Yinghui Sun, Rongming Wang
University of Science and Technology Beijing

FA-P02

Microstructure, Optical, and Scintillation Properties of Ce: Gd₂YAl₂Ga₃O₁₂ Transparent Ceramics

Shuilin Chen^{1,2}, Benxue Jiang¹, Long Zhang¹

1. Key Laboratory of Materials for High Power Laser, Shanghai Institute of Optics and Fine Mechanics, CAS, Shanghai 201800

2. University of Chinese Academy of Sciences, Beijing 100049, China

FA-P03

Stability Investigation of Pt₁/α-Fe₂O₃ Single-atom Catalyst with High Number Density under Gas Environments

Sibin Duan¹, Jingyue Liu², Rongming Wang¹

1. Beijing Key Laboratory for Magneto-Photoelectrical Composite and Interface Science, School of Mathematics and Physics, University of Science and Technology Beijing, Beijing 100083, China

2. Department of Physics, Arizona State University, Tempe, Arizona 85287, United States

FA-P04**Effects of Sample-size on the Compression Deformation Behavior of a CuZr-based Bulk Metallic Glass Composite**

Yongsheng Chen, Weizhong Liang, Longxing Wang, Xinchu Liu
Heilongjiang University of Science and Technology

FA-P05**Advanced Lithium Metal Anodes Based on 3D Hierarchically Porous Metals**

Yifeng Cheng, Xi Ke, Zhicong Shi
Guangdong University of Technology

FA-P06**Dispersion Study of Aramid Pulps in Epoxy Resin System**

Xiaoma Ding, Haijuan Kong, Mengmeng Qiao, Zhifeng Hu, Muhuo Yu
Donghua University, Songjiang district, Shanghai

FA-P07**Room Temperature Tensile Deformation Behavior of a Ni-based Superalloy with High W Content**

Guichen Hou, Jun Xie, Shuling Xun, Fengjiang Zhang, Zhenjiang Wang, Minghui Tan, Jinjiang Yu, Xiaofeng Sun, Yizhou Zhou
Institute of Metal Research, Chinese Academy of Sciences

FA-P08**Study on the Joints Properties of Aluminum Foams/Aluminum Plate by Transient Liquid Phase Bonding Process**

Bensheng Huang, Xiong Wen, Xing Zhao, Guangwen Li
College of Materials Science and Engineering, Southwest Petroleum University

FA-P09**Investigation of the {10-12} twin in the Mg-Gd-Zn alloy**

Yu Liu^{1,2}, Nana Wang^{1,2}, Hongtao Liu^{1,2}, Tao Lin^{1,2}, Jixue Zhou^{1,2}
1.Advanced Materials Institute, Qilu University of Technology (Shandong Academy of Sciences)
2.Qilu University of Technology (Shandong Academy of Sciences), Shandong Provincial Key Laboratory for High Strength Lightweight Metallic Materials

FA-P10**Au/NiS_x Heterostructures: Controlled Growth and Structure-Dependent Catalytic Performances for Hydrogen Evolution Reaction**

Yuepeng Lv, Sibin Duan, Rongming Wang
Beijing Key Laboratory for Magneto-Photoelectrical Composite and Interface Science, School of Mathematics and Physics, University of Science and Technology Beijing, Beijing 100083, China

FA-P11**Effect of FSP on the Microstructure and Mechanical Property of Al-Mg Alloy**

Yongqiang Qin^{1,2}, Congcong Meng¹, Feifei Liu¹, Shiang Zhou^{1,2}, Jun Huang^{1,2}, Yucheng Wu^{1,2}
1.Hefei University of Technology
2.Laboratory of Nonferrous Metal Materials and Processing Engineering of Anhui province

FA-P12**Basic Issues for High Pure Titanium Extraction through Molten Salt Electrolysis**

Jianxun Song, Shu Yongchun, He Jilin
Henan Province Industrial Technology Research Institute of Resources and Materials

FA-P13**Metallurgical Performances under Different Melt Feeding Modes in a Bloom Continuous Casting Mould**

Haibo Sun¹, Zheng Li¹, Liejun Li², Dongchu Chen¹
1.Foshan University
2.South China University of Technology

FA-P14**Atom-Resolved Observation of Au Dendrites Evolved from Nanoparticles on MoS₂**

Yinghui Sun¹, Haofei Zhao¹, Dan Zhou², Rongming Wang¹
1.University of Science and Technology Beijing
2.Stuttgart Center for Electron Microscopy, Max Planck Institute for Solid State Research

FA-P15**高效准固态量子点敏化太阳能电池研究**

卫会云^{1,2}, 郑新和¹, 李冬梅², 孟庆波²
1.北京科技大学
2.中国科学院物理研究所

FA-P16**Study on Microstructures and Properties of Spinning for Silicon Carbide Particle Reinforced Aluminum Composite**

Haibao Wu¹, Defu Li², Guoqiang Chai², Jizhen Li¹, Degui Liu¹
1.Aviation Industry Corporation of China Manufacturing Technology Institute
2.General Research Institute for Nonferrous Metals Beijing

FA-P17**Lubrication and Surface Quality Control of Aluminum Strips in Hot Rolling Process**

Lei Xia¹, Yan Li^{2,3}, Hongmei Zhang⁴
1.Research Institute of Petroleum Processing, SINOPEC
2.State Key Laboratory of Metal Material for Marine Equipment and Application
3.Iron & Steel Research Institutes of Ansteel Group Corporation
4.University of Science and Technology Liaoning

FA-P18**Studies on Thermal-Stress Response of Ni-base Alloy Coating with Energy Addition**

Li Zhang
Institute of Fluid Physics, CAEP

FA-P19**Technical Study on Preparation of Co/C Composite Nanofibers via Electrospinning**

Sa Zhang, Jianjiang Wang, Fang Zhao
Army Engineering University Shijiazhuang Campus

FA-P20**Near-Infrared Waveguide Formation and Surface Damage Analysis in LiF Crystals via Ion Irradiation**

Li Zhang
Taishan University

FA-P21**Research on Influence of Interference Fit on Fatigue Life of 2024-T351 Aluminum Alloy Double Shear Lap Joints**

Qingyun Zhao¹, Hong Huang¹, Yunliang Wang²
1.AVIC Manufacturing Technology Institute
2.Naval Aeronautical Engineering Institute

FA-P22**Tailorable Shell Thickness in Monodisperse Cu@Ag Core-Shell Nanocrystals**

Xiyue Zhu
Beijing Institute of Technology