

# Poster Session

1# Hall, west wing 3:30 – 5:30pm, Oct. 15, 2023

- PA01-841  
Bai Jiabin  
(111) Facets-oriented Au-decorated carbon nitride nanoplatelets for visible-light-driven overall water splitting
- PA01-1014  
ming yao  
Influence of heat exchanger structure on hydrogen absorption-desorption performance of hydrogen storage vessel
- PA02-574  
Shi Haonan  
Realizing high in-plane carrier mobility in n-type SnSe crystals through deformation potential modification
- PA02-576  
Wang yuping  
Unraveling the structural details and thermoelectric transports of 2D-3D hetero-structure composites
- PA02-582  
Qiu Yuting  
Electrical and Thermal Transport Properties of  $\text{Ge}_{1-x}\text{Pb}_x\text{Cu}_y\text{Sb}_y\text{TeSe}_2$
- PA02-597  
zhe Zhao  
Strategies for manipulating thermoelectric properties of layered oxides
- PA02-593  
Wang Sining  
 $\text{BiSbSe}_3$ : A promising Te-free thermoelectric material
- PA02-594  
Siqi Wang  
Fine Tuning of Defects Enables High Carrier Mobility and Enhanced Thermoelectric Performance in n-type PbTe
- PA02-598  
Shaoping Zhan  
Realizing high-ranged thermoelectric performance in  $\text{PbSnS}_2$  crystals
- PA02-601  
Wang Lei  
Evolving Strategies Toward Seebeck Coefficient Enhancement
- PA02-605  
Pang Huimei  
Realizing ranged performance in SnTe through integrating bands convergence and DOS distortion
- PA02-606  
Liu Dongrui  
Lattice plainification advances highly effective SnSe crystalline thermoelectrics
- PA02-779  
SIMING GUO  
Preparation and Optimization of Melt  $\text{Bi}_2\text{Te}_3$ -based Thermoelectric Thick Film based on Multi-field Induction
- PA02-627  
Su Lizhong  
Enhancing Carrier Mobility and Seebeck Coefficient by Modifying Scattering Factor
- PA02-635  
Hong tao  
Enhanced thermoelectric performance in SnTe due to the energy filtering effect introduced by  $\text{Bi}_2\text{O}_3$
- PA02-992  
Xu zibo  
Thermoelectric Performance Optimization of Bismuth Telluride-Based Materials by Micro-zone Melting Method
- PA02-686  
Guo Kai  
Rational design and thermoelectric properties of 111-type Zintl compounds  $\text{ACdSb}$  (A = Li, Na, K)
- PA02-758  
Zhou Man  
Modulation Doping in the Surface Region of  $\text{Bi}_2\text{Te}_3$  Semiconductor Films for Improved Electrical Contact at Metal Interfaces
- PA02-770  
Shucheng Bao  
Wearable Thermoelectric Generator with Cooling-enhanced Electrode Design for High-efficient Human Body Heat Harvesting

- PA02-771  
Tian bangzhou  
Low lattice thermal and enhanced thermoelectric performance of SnTe-based materials via interface modification
- PA02-780  
Zhu Jianglong  
Electron-phonon Transport Characteristics in High-Concentration Doped SnTe Thermoelectric Materials
- PA02-819  
lin gan  
Different roles of localized d-electrons for thermoelectric properties of PbS and PbTe
- PA02-820  
Rao Xuri  
Structure optimization and annealing engineering induced high thermoelectric performance in filled CoSb<sub>3</sub> skutterudites
- PA02-877  
Liu Xin  
Enhanced thermoelectric performance of Mg<sub>x</sub>Ti<sub>1-x</sub>NiSb double half-Heusler materials
- PA02-925  
chengyu wei  
Thermoelectric Devices for Power Generation from Daily Temperature Swings
- PA02-1039  
kaiwei guo  
A new synthesis route for high-performance  $\alpha$ -MgAgSb for industrialization
- PA03-501  
Cho DanielSanghyun  
On-Demand Transient Triboelectric Nanogenerator activated by ultrasound for Subcutaneous Antibacterial Effect
- PA03-623  
Niu Jianan  
Bulk transfer of GaN for flexible skin display
- PA03-767  
Zilong Dong  
Ultrafast and Low-Power 2D Bi<sub>2</sub>O<sub>2</sub>Se Memristors and Artificial Synapse
- PA03-810  
Wei Liang  
Self-Powered Embedded-Sensory Adjustment for Flow Batteries
- PA03-839  
Lee HyeonYeong  
Self-powered triboelectrification-induced microbial blocking textile
- PA03-872  
Jiahong Yang  
Stretchable multifunctional self-powered systems with Cu-EGaIn liquid metal electrodes
- PA03-935  
Wang Yueshuai  
Single metal atom oxide anchored Fe<sub>3</sub>O<sub>4</sub>-ED-rGO for highly efficient photodecomposition of antibiotic residues under visible light illumination
- PA03-956  
cui zhaowei  
Flexible, transparent, and hydrophobic organogel elastomer for organogel sensor underwater and energy harvesting applications
- PA03-999  
mei Niu  
Study on flame retardancy and mechanical properties of waste polyester fabric/hemp stalk composites
- PA04-432  
zeng xu  
Effect of benzyl alcohol on the melting process of poly(vinyl alcohol)
- PA04-783  
Han Sumei  
The Synergy of Tensile Strain and Ligand Effect in PtBi Nanorings for Boosting Electrocatalytic Alcohol Oxidation
- PA04-784  
Zhang Huaifang  
Isolated Electron-Rich Ruthenium Atoms in Intermetallic Compounds for Boosting Electrochemical Nitric Oxide Reduction to Ammonia
- PA04-788  
He Caihong  
3D hierarchical Cu-MOF nanosheets-based antibacterial mesh
- PB01-957  
Cheng Xuli  
Ferroelectric and negative piezoelectric properties in oxyhydroxide monolayers  $\gamma$ -XOOH (X = Al, Ga, and In)

- PB01-993539  
Lanxin Liu  
Origin of the anomalous electrical transports in quasi-one-dimensional Ta<sub>2</sub>NiSe<sub>7</sub>
- PB01  
Yue Xie  
Second-order topological phases and tunable Majorana zero modes in Rashba superconducting loop systems
- PB02-351  
Zheng Ming  
Biaxial and uniaxial strain tuning of photoluminescence properties in rare earth doped ferroelectric thin films
- PB02-994451  
Wanqian Shi  
Fabrication of ultra-thin ferroelectric Al doped HfO<sub>2</sub> thin film for 3D vertical memory applications
- PB02-994450  
Xiaolin Wang  
Reversible Phase Transition and Its Mechanism of Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub>/VO<sub>2</sub> Heterostructure
- PB03-436  
Liu Yuchen  
Flexible wearable sodium ion Electrical sensor based on LMP91000 micropotentiostat
- PB03-509  
sun Tianyi  
Flexible continuous blood glucose monitoring calibration based on electrochemical impedance spectrum normalization compensation
- PB04-1066  
Long Zhenghao  
A perovskite nanowire array based Spherical Bionic Eye with Filter-free Color Vision, In-device Neuromorphic Signal Preprocessing and Adaptive Optics
- PB04-1068  
Ding Yucheng  
Hemispherical Infrared Image Sensor Based on Ionic Thermoelectric Nanowire Array
- PB04-994  
Zhang Daquan  
Large-scale planar and spherical light-emitting diodes based on arrays of perovskite quantum wires
- PB04-1077  
Poddar Swapnadeep  
Ultra High Density Perovskite Nanowire for Data Storage and Neuromorphic Computing
- PB04-1023  
Shu Lei  
Highly efficient blue light-emitting diodes based on perovskite film with vertically graded bandgap and organic grain boundary passivation shells
- PB04-993  
WENYING TANG  
Micro-heater Integrated Nanotube Array Gas Sensor for Parts-Per-Trillion Level Gas Detection and Single Sensor-based Gas Discrimination
- PB04-1017  
CAO Yang  
High-efficiency, flexible and large-area red/green/blue all-inorganic metal halide perovskite quantum wires-based light-emitting diodes
- PB04-728  
shi bori  
Split-Ring Structured All-Inorganic Perovskite Photodetector Arrays for Human-Machine Interaction
- PB04-759  
Hu Jingcong  
Origin of the Bias Instability in CsPbI<sub>3</sub> Light-Emitting Diodes
- PB04-1002  
Zhou Yu  
Ultra-wide field-of-view pinhole compound eye using hemispherical nanowire array for robot vision
- PB05-540  
Tan Yong  
Chiral molecule detection based on racemic plasmonic nanostructures
- PB05-855  
Guo Qi  
Multimodal-Responsive Circularly Polarized Luminescence Security Materials
- PB05-856  
Zhang Mingjiang  
Processable circularly polarized luminescence material enables flexible stereoscopic 3D imaging
- PC01-471  
Zhang Binghuan  
Dielectric properties of gel patch on reverse iontophoresis

PC01-1022  
sen wang  
Bioapplications of Ruthenium Complexes

PC01-1019  
eunwoo seo  
Development of Scepterin-Au Nano-Antibiotic Formulation for Overcoming Carbapenem-Resistant Gram-Negative Bacterial Infections

PC01-1049  
Gao Liting  
Tough dynamic nanocomposite injectable and self-healing hydrogel

PC01-1131  
An Jongmin  
Organic-Inorganic Hybrid Nanozyme for a metastasis suppressor of Glioblastoma.

PC03-433  
Wang Cong  
Combinatorial Discovery of Antibacterials via a Feature-Fusion Based Machine Learning Workflow

PC03-806  
pengyu yan  
Increase Natural Rubber Latex's Antibacterial Activity by Including Carboxymethyl Chitosan-Ag Nanoparticles: An In Vitro and Mouse Bladder Study

PC03-997  
Baoxia Xue  
Research on the construction and properties of waste cotton cellulose/carbon dots composite antibacterial hydrogel

PC03-1063  
li gangfeng  
Infection Microenvironment-Responsive Hydrogen Selenide Delivery Nanogels

PC03-1102  
Jiang fengqiong  
A novel alginate-based film with bilayer structure for food preservation and self-monitoring

PD01-703  
pei Li  
Investigation on Homogenization of a Newly Developed Ni-Cr-Co Superalloy

PD01-719  
Cheng Yuan  
The effects of Mo addition on the microstructure and creep property of Ni-based single crystal superalloys

PD01-833  
Pan Qinghai  
Dual effects of Co of microstructures stability of a 4th Ni-based single crystal superalloys

PD01-850  
zhou yongli  
Effect of Fe on Steam Oxidation of Newly Designed Fe-Cr-Ni Based Alloys

PD01-860  
Liu Hao  
微观组织对一种新型镍基变形高温合金蠕变性能的影响

PD02-511  
YAO LU  
Development of high performance energy absorption structures

PD02-695  
Ying Huiqiang  
In-situ neutron scattering study of plastic deformation mechanism in a high-entropy alloy with pronounced chemical short-range ordering

PD02-824  
Wang Jingchen  
Effects of surface mechanical attrition treatment and shot peening on the fatigue properties of Inconel 718 at elevated temperature

PD02-845  
XUFEN XIAO  
Template-Free Fabrication of A Continuous Gold Network for Use as A Transparent Conductive Electrode

PD03-638  
wang hang  
Tuning Elinvar Effect in Severely Distorted Single Phase High Entropy Alloys

PD03-672  
Shang Yinghui  
Customized Design of Amorphous Solids by Generative Deep Learning

PD03-673  
CHEN Zhaoqi  
Overcoming Strength-Toughness Trade-off in Eutectic High Entropy Alloy by Optimizing Chemical and Microstructural Heterogeneities

PD03-742  
Zhao Yanchun  
Mn Content Optimum on Microstructures and

Mechanical Behavior of Fe-based Medium Entropy Alloys

PD04-1106

Pan Xi

Microstructure evolution and dynamic restoration of a metastable  $\beta$  titanium alloy during hot deformation

PD04-993903

Shupeng Li

Superior elevated-temperature strength of Mg–Y–Sn alloys with thermostable multi-scale precipitates and grain structure

PD04-993906

Ruihao Fu

The quantitative contribution of basal or prismatic Mg<sub>2</sub>Sn on twinning behaviors during compression in Mg–Sn alloy

PD04-993641

Zhuang Cui

Achieving excellent creep resistance of Mg–Zn–Ca–Gd alloy via dense GP zones and multi-scale precipitates

PD05-463

Chaudhary Bina

Silicon aluminum oxynitride (SiAlON) materials for next-generation cermet

PD05-1191

Jiangshan Chen

Study on the Hydrothermal Corrosion Behavior of SiCfSiC Composites

PE01-424

HE YUNHU

Untethered Stimuli-responsive Materials and Devices: Design and Manufacturing

PE01-842

zhang xiaoping

Heterogeneous composites of polyacene quinone radical (PAQR) decorated with nanosized Fe<sub>3</sub>O<sub>4</sub> spheres achieving improved electromagnetic wave absorption

PE01-1105

Guo Mengchao

Research on microwave absorption properties of FeCoGe composites and achieving ultra-broad bandwidth via metamaterial design

PE02-710

Wuzhang Yang

Effect of carbon doping on the structure and

superconductivity in AIB

PE02-859

Miao Chaohang

Effect of multiple repeated sintering for FeSe<sub>0.4</sub>Te<sub>0.6</sub> superconductors

PE02-973

Lv Run

Origin of two-gap superconductivity in CsV<sub>3</sub>Sb<sub>5</sub>

PE02-1061

Zhang Jiaying

Study on the growth mechanism of FeSeTe superconducting films in the initial growth stage

PE03-666

Jiang Yuanyuan

Prediction of Giant Tunneling Magnetoresistance in RuO<sub>2</sub>/TiO<sub>2</sub>/RuO<sub>2</sub> (110) Antiferromagnetic Tunnel Junctions

PE03-674

He Bin

Realization of zero-field skyrmions in a magnetic tunnel junction

PE03-798

Kebing Wang

A versatile fluxing strategy towards high-performance magnetic nanocrystalline alloys with large ferromagnetic element content

PE03-911

Lan Guibin

Giant Tunneling Magnetoresistance in Spin-Filter Magnetic Tunnel Junctions Based on van der Waals A-Type Antiferromagnet CrSBr

PE03-924

yulai Liu

The research on the microstructure and magnetic performance of Nd<sub>2</sub>(FexCo<sub>1-x</sub>)<sub>17</sub> soft magnetic alloy

PE03-965

TIAN RUNQIU

Temperature-dependent exchange bias in CrCl<sub>3</sub>/Fe<sub>3</sub>GeTe<sub>2</sub> heterostructures

PE03-992917

Zheng Ming

Electrically driven nonvolatile tuning of physical properties in correlated oxide films

PF01-445

Jiang Yifan

Improve the Electrical Performance of InAs

Nanowire Field-Effect Transistors by Passivation of Ferroelectric Film P(VDF-TrFE)

PF01-450

Wang Liyuan

A third-generation electrochemical glucose sensor based on metal-organic framework

PF01-455

Wang Bingjie

C-axis intrinsic pull-piezoresistive effect in van der Waals materials

PF01-749

Li Chong

非对称人工自旋冰/超导异质结构器件

PF01-822

Sun yujie

Yujie Sun, Rongjie Zhang, Bilu Liu and Hui-ming Cheng

PF01-1057

Yan Wenxiu

Revealing the Size effect of Pt of Pt@MoS<sub>2</sub> to Hydrogen Evolution Reaction Catalytic Activity

PF01-1195

Teng Xueai

Self-supported twined PtNi nanosheets for efficient hydrogen evolution reaction

PF02-441

Xin Jialin

High-FOM surface plasmon resonance sensor apply for early diagnosis of Alzheimer's disease

PF02-541

hao ruan

High sensitive surface plasmon resonance sensor apply in fecal occult blood detection

PF02-549

Zhou Zhikun

Electrothermal analysis and heat dissipation optimization design of self-assembled-membrane inductors

PF02-817

Li Changhua

High-Entropy van der Waals Materials Formed from Mixed Metal Dichalcogenides, Halides, and Phosphorus Trisulfides

PF02-932

chen li

Investigation on Miniature Wireless Sensors with Integrated Three-Dimensional Self-Rolled-Up

Membrane Technology for Enhanced Sensing Capabilities

PG01-434

Li Juan

Microstructure and mechanical characterization of diffusion bonded CoCrCuFeNi HEA/TC4 joints utilizing a Ni interlayer

PG01-1155

Xingwu Li

Strong Cooperation Growth Related with Interfacial Energy Anisotropy of Two Phases in the Ternary Eutectic

PG02-773

Zhang Jinsen

Prediction of bipolar VSi<sub>2</sub>As<sub>4</sub> and VGe<sub>2</sub>As<sub>4</sub> monolayers with high Curie temperature and strong magneto crystalline anisotropy

PG02-945

Li Tianzhao

Ion irradiation effects in 2D structures: Monte Carlo simulations

PG02-948

Zhang Ling

Polaronic defects in monolayer CeO<sub>2</sub>: Quantum confinement effect and strain engineering

PG02-952

song Biyu

One-dimensional topological phase and tunable soliton states in atomic nanolines on Si(001) surface

PG02-954

Gao Wenjin

Two-dimensional MXenes for the capture and separation of radioactive fission gases Xe and Kr: A systematic first-principles study

PG04-885

Chen Yuzhuo

A Fine Structure Sensitive Deep Learning Framework for High Precision of Catalytic Performance Prediction

PG04-890

Pios Sebastian

On-the-fly simulation of time-resolved stimulated-emission spectra accelerated by machine learning

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Huang Dongyang

From Experimental Research to Data Driven Research on Dielectric Smart Materials

PG05-1018  
Kangkai Hu  
High corrosion resistance Ti-6Al-4V coating with metallurgical bonding by laser cladding

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Shanxin Li  
3D Skeletal Porous Nanocage of Ternary Metallic Oxide with Excellent Electromagnetic Wave Absorption

PG05-1088  
LI MA  
Stability of the microstructure and properties of Ti<sub>2</sub>AlNb alloys under thermal exposure conditions

PG05-1103  
Hao Fan  
Hot processing map and high-temperature deformation behavior of TB17 titanium alloy

PG05-1123  
Dong Meijing  
Isothermal Oxidation Behavior of Nickel Base Single Crystal DD6 Film-Cooling Blades at 1050 °C

PG05-1137  
deng zhiwei  
Quantitative study of high-frequency fatigue hole-edge stresses in nickel-based single-crystal superalloy

PG05-1138  
Dongcan Tan  
Study on the interfacial microstructure and properties of TC6 alloy electroplated with chromium bilayer coatings

PG05-1139  
Xinyan DONG  
Study on fretting wear characteristics of edge plate damping material K417 nickel-based superalloy with different displacement amplitudes

PG05-01  
Xiaoyi Liu  
Oxidation resistant composition design of Al<sub>x</sub>(CoCrFeCuNi)<sub>1-x</sub> combinatorial HEA thin film

PG06-667  
Guo Yunna  
Revealing the growth and stress generation of lithium dendrites by in situ ETEM-AFM

PG06-971  
Zhang Kaidi  
In-Situ TEM Study of La<sub>2</sub>O<sub>3</sub> Phase Change Under Vacuum Heating Condition

PH01-602  
Yankey Richmond Polley  
Multifunctional pressure/temperature/bending sensor made of carbon fibre-multiwall carbon nanotubes for artificial electronic application

PH01-618  
Wang Xin  
Strong metal-support interaction boosts the electrocatalytic hydrogen evolution capability of Ru nanoparticles supported on titanium nitride

PH01-585  
XIANG Yiming  
Ultrasound-triggered interfacial engineering-based microneedle for subcutaneous bacterial infections