

Poster Exhibition

Date : **Nov. 8th**

Location : **2F Gallery**

Posting time : **10:00~17:00**

TOPIC : Batteries

Poster no.	Paper no.	Abstract	Presenter
PO-A01	0001	Fabrication of nanoporous electrospun PtNi nanowires and their application as electrocatalyst for PEMFC	Ting Jui Chen
PO-A02	0002	Fabrication of nanoporous electrospun PtFe nanowires and their application as electrocatalyst for PEMFC	Lu Wet Te
PO-A03	0003	High Energy Density and High Safety Lithium-ion Pouch Cells	Jyu-Lum Yan
PO-A04	0024	Silicon/hard carbon composites derived from phenolic resin as anode materials for lithium-ion batteries	Wei-Ren Liu
PO-A05	0039	Revealing the effect of DMSO-regulated aqueous electrolytes on the improved electrochemical stability of electrodes in zinc ion batteries	Ming Hsien Lin
PO-A06	0045	Development of Polymer-Ceramic Composite Solid Electrolytes for Lithium-ion Batteries	Keng-Hao Cheng
PO-A07	0053	Effect of modification temperature of SiOx carbon coating on electrochemical properties	Yan-Xiong Liao
PO-A08	0063	Electrochemical Investigation of Surface Modifications on Graphite Anode Materials for Lithium-Ion Batteries	林秀芬
PO-A09	0075	Functional electrolyte additives for controlling SEI growth and enhancing lithium-ion battery performance	Ming-Hua Wang
PO-A10	0099	Surface modification of 5V high-voltage	Guo-Kai Xu

LiNi_{0.5}Mn_{1.5}O₄ cathode materials via SWCNTs wrapping

PO-A11	0101	Preparation of LiTa ₂ PO ₈ /PVDF-HFP Composite Polymer Electrolytes for All-solid-state Lithium Metal Battery	Bo-Rong Zhang
PO-A12	0102	Preparation Composite Cathode based on Single Crystal NCM811 Materials for All-Solid-State Lithium Metal Battery	Hohg-Zhi Lin
PO-A13	0107	Thermal-extrusion method for the preparation of Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ (LATP)-based composite solid electrolytes using ZIF-8 and Al-LLZO as a buffer layer between LATP/Li interface for all solid-state lithium metal batteries	Desalegn Yilma Kibret
PO-A14	0144	Functional Polymer Cathode Modification Technology	Ju-wen Chang

TOPIC : Conversions

Poster no.	Paper no.	Abstract	Presenter
PO-B01	0030	Ni-Co-Mo Oxide-Based Electrocatalysts for Simultaneous Hydrogen Evolution and Methanol Oxidation	Da-Ren Hang
PO-B02	0031	Unlocking the Potential of Cobalt Oxide through Iron Electrochemical Activation for Oxygen Evolution Reaction	Da-Ren Hang
PO-B03	0094	Ultrathin CeO _x Supported Pt NPs for HER	Shen-Wei Yu
PO-B04	0141	Fabrication and Characterization of Copper-Based Nanofibers for Electrocatalytic Reduction of Carbon Dioxide	Jia-Ru Lin
PO-B05	0159	Forming an electrochemical sensor by integrating molybdenum diselenide with vertically aligned carbon nanotubes	Lei Hu
PO-B06	0241	Regulating the Composition and Structure of Iridium/Iridium Oxide	Yo-Yuan Gu

		Nanofibers: Their Impact on Electrochemical Activity and Application in Hydrogen Peroxide Sensors	
PO-B07	0248	First-Principles Study of Band Offsets at Ag _z Cu _{1-z} In _{1-x} Ga _x (Se _{1-y} S _y) ₂ /CdS Heterointerfaces for Photovoltaic Applications	Ngoc Thanh Thuy Tran
PO-B08	0286	Investigation of an Intelligent Power Conversion System for Battery Energy Storage Systems	Chao-Tsung Ma
PO-B09	0287	Development of a Two-Stage Multifunctional EV Battery Charging System	Chao-Tsung Ma
PO-B10	0291	Study on the hydrogen evolution reaction of preparing metal-glycerate high-entropy alloys.	Chen-Xi Hu
PO-B11	0300	Mild Synthesis Approach to Co _{1-x} Fe _x (OH) ₂ -SO ₄ Nanosheets with Optimized OER Catalytic Activity	Chen-Yu Wu
PO-B12	0310	An Economically Efficient Nickel-Iron Electrocatalyst for Alkaline Hydrogen Evolution Reaction Hydrothermal Method on Foam Nickel at Constant Potential	Mengyao Gao
PO-B13	0311	Upcycling of waste Lithium Iron Phosphate from Spent Lithium-Ion Batteries into electrocatalysts for hydrogen evolution reaction: A strategy to turn the trash into treasure	Jing-Xian Chen
PO-B14	0324	Use of Electrochemical Intercalation in Preparation of Expanded Graphite	Ting-Li Fang
PO-B15	0325	Harnessing Ni SACs on cogently designed S-doped nanofiber-based catalysts for selective CO ₂ electroreduction	Varad Modak

TOPIC : Photoelectrochemistry/Electroplating

Poster no.	Paper no.	Abstract	Presenter
PO-E01	0077	The Effect of Contact Pin on the uniformity of Copper Deposition in Electroplating with Numerical Model	YiLun Hung
PO-E02	0079	A Cu-Cu Direct Bonding Method by Using Cu Particle	Chun-Wei Chiang
PO-E03	0222	Size-controlled synthesis in titanium nanoparticle/graphene oxide nanoribbon composites for ractopamine detection	Chia-Liang Sun
PO-E04	0271	Enhancing the Photoelectrochemical Properties of Bi ₂ O ₃ -ZnO Nanocomposite Layers Through Oxygen Vacancy Engineering	Po-Hsiang Wang
PO-E05	0280	SPR-Enhanced Pt@SiC Nanozyme and its' catalyzation of TMB	Yu-Cheng Lu
PO-E06	0314	Synergistic Effect of Water and Oxygen on Enhancing Stability and Open-Circuit Voltage in CsPbI ₂ Br Perovskite Solar Cells	Chih-Ching Kuo
PO-E07	0315	Enhancing Stability and Efficiency in n-i-p Perovskite Solar Cells Using D-A Copolymers Hole Transport Layers and MeO-2PACZ/MoO ₃ Interface Engineering	Cheng-Yan Song
PO-E08	0329	Cobalt Doped V ₂ O ₅ Thin Film as an Ionic Storage Layer for Electrochromic Application	Tien-Chai Lin
PO-E09	0350	Warpage Reduction of Electroplated Cu Foils through Nucleation/Growth Modification using Polymer Additives	Hung-Chun Chen

Date : **Nov. 9th**

Location : **2F Gallery**

Posting time : **10:00~16:00**

TOPIC : Batteries

Poster no.	Paper no.	Abstract	Presenter
PO-A14	0128	Effective Electrochemical Study of Optimized LiFePO ₄ Composite Cathode for all-solid-state Li-metal Battery	Yin-Li Wang
PO-A15	0134	Surface Modification of Current Collectors to Enhance the Cycling Efficiency of Anode-Free Lithium-Ion Batteries	Jui-Hung Chen
PO-A16	0140	Establishment of Graphene Process Flow for SiO _x -C Anode Adhesion Improvement	Chun-Hao Huang
PO-A17	0155	Recovery of Vanadium from Waste Aqueous Zinc-ion Batteries	Hsing-Kai Tseng
PO-A18	0169	Effect of Lithium Carbonate on Properties of Nickel-Rich Cathode Materials	Yu-Hsuan Chen
PO-A19	0221	Influence of Processing Techniques on Crystallinity and Performance of Ni-rich Layered Oxides Cathode	Yu-Fan Chen
PO-A20	0224	Converting waste phenolic resin into hard carbon as anode materials for high-performance sodium-ion batteries	Yao-Yang Chang
PO-A21	0226	Morphology-Dependent Electrochemical Performance of High-Entropy Oxide Anodes for Lithium-Ion Batteries	Ananya Panda
PO-A22	0235	Synthesis of Quaternary Ni-rich NCMA Layered Cathode via Solid State Reaction	ying-yi chen
PO-A23	0240	Novel Application of LiVPO ₄ F as the Cathode Material for Anode-free Hybrid	Yu-Chun Huang

		Lithium/Sodium Metal Batteries	
PO-A24	0242	Effect of Na Content on Electrochemical Behavior of Na_xMnO_2 Layered Cathodes based on Defect Chemistry Consideration	卓薰雅
PO-A25	0249	Preparation of Nickel-Rich $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ (NCA) Composite Cathode via Novel Deposition Method	Ray-Rong Tang
PO-A26	0253	Low iron ion impurity electrolyte and high electrode active catalysts for vanadium redox flow battery	Chia-Hung Yeh
PO-A27	0264	Safety evaluation of commercial lithium-ion battery separators	Yan-Heng Wu
PO-A28	0307	Spherical Graphene Microstructures on Battery Separators: Boosting Li-S Cell Efficiency	Thi Ai Ngoc Bui
PO-A29	0326	Capacity-Enhanced Thick $\text{Li}_4\text{Ti}_5\text{O}_{12}$ (LTO) Electrodes Prepared by Partial Densification Process	Ze-Ren Jhang
PO-A30	0328	Machine-Learning Assisted Analysis on the Transport Behavior of Zn^{2+} in Room-Temperature Ionic Liquid Electrolytes	Minjoon Hong
PO-A31	0349	Regulating Li deposition with different morphology of fibers	Ai Ling Huang

TOPIC : Fast Energy Storage Materials and Devices

Poster no.	Paper no.	Abstract	Presenter
PO-C01	0040	The application of niobium oxide and reduced graphene oxide composite electrodes in supercapacitors	Yang-Ming Lu
PO-C02	0119	Using 2D Molybdenum disulfide to improve the supercapacitor properties of copper oxide	Yang-Ming Lu
PO-C03	0127	Investigation of the Effect of Different	Yang-Ming Lu

		Copper Oxide Morphologies on Supercapacitor Performance	
PO-C04	0276	Design of a Battery Management System for Electric Stackers Based on NUVOTON Cortex-M4	Chun Kai Hung
PO-C05	0294	Development of methyl urea-based deep eutectic solvents for high-performance zin-ion batteries based on polyaniline/graphene nanofiber composite cathodes	Jeng-Yu

TOPIC : Basic Electrochemistry

Poster no.	Paper no.	Abstract	Presenter
PO-D01	0023	Effect of Temperature on Electrochemical Kinetics for Positive Electrodes of Vanadium Flow Batteries	Kuan-Yu Pan
PO-D02	0029	Comparison of Corrosion Kinetics of Copper and Cobalt in CMP Slurries with Different Organic Complexing Agents	Pei Huan Hsueh
PO-D03	0076	Spontaneous Reduction of Gold (III) on Fe and Pyrrolic-N-Co Doped Nanoporous Carbon from ZIF-8 for Electrochemical Immunosensing of CA-125	Nattharika Runprapan
PO-D04	0084	Sensing Performance of EGFET pH Sensors with ZnWO ₄ Membrane Fabricated on Glass Substrate	You-Kai Wu
PO-D05	0086	Performance of an AlInGaO Extended-Gate Field-Effect Transistor pH Sensor	Jia-Hua Wu
PO-D06	0095	Property of Sensitivity pH sensor based on InHfGaO via Annealing	Yen-Fu Chen
PO-D07	0163	The influence of ternary metal oxide with waste sponge composite for electrocatalytic in alkaline water electrolysis	陳彥瑋
PO-D08	0231	Tuning Palladium with Heteroatom-Rich	ENDALKACHEW

		Ligands in Homoleptic and Heteroleptic Coordination Spheres for Enhanced Electrochemical Hydrogen Peroxide Production	ASEFA MOGES
PO-D09	0277	Enhancement of electrochemical activities using Au@MOF as a substrate for vibrio harveyi bacteria detection	Rajesh kumar Raghav
PO-D10	0292	Electrochemical Synthesis of Pd-Ni Nano-dendrites Heterostructure for Nonenzymatic Glucose Detection	Yang-Sheng Lu
PO-D11	0312	Immobilization of MIL-100(Fe) Metal-Organic Framework on a PEDOT Modified Electrode to Enhance the Detection of Tartrazine	Shao-Yang Wu
PO-D12	0318	Modification of pencil lead with conductive PEDOT to enhance the selectivity for sensing hydroquinone, resorcinol, and bisphenol	Chih-Yu Lin