

November 1, Saturday (12:00-14:00)

“-S”: Student poster competition

Poster Session (A) Batteries and Storage Devices

#	Abstract No.	Title	Presenter	Institution / Organization	Authors
A1	0014-S	Formation of An Ultrathin Li ₄ Ti ₅ O ₁₂ Interlayer on Garnet Solid-State Electrolytes via ALD TiO ₂ for Enhanced Electrochemical Stability and Performance	Chang Chia Yu	National Sun Yat-sen University	Chang Chia Yu, Wang Chih Chieh
A2	0033-S	Ordered Macro–Microporous ZIF-67 derived composite for electrochemical application	HUNG-HSIEN WU	National Yunlin University of Science and Technology	Pei-Hsin Young, HUNG-HSIEN WU
A3	0034-S	Synthesis of Hierarchical Porous Ni-SOM-ZIF-8 Derived Metal Oxides for Electrochemical Application	Fu-Yao,Xu	National Yunlin University of Science and Technology	Fu-Yao,Xu, Christine (Pei-Hsin) Young
A4	0040-S	Study on the mechanism of the BiOCl cathode in the chloride-ion battery	Pandeeswari Jayaraman	Mingchi University of technology	Pandeeswari Jayaraman, Masashi Kotobuki
A5	0069-S	Enhanced Lithium–Sulfur Battery Catholytes Enabled by Arene-Assisted Lithium Dissolution for High Sulfur Solubility and Long Cycle Life	Feng-Chieh Chou	National Yang Ming Chiao Tung University	Feng-Chieh Chou, Ngoc Long Le, Yu-Sheng Su
A6	0076-S	Dual-Salt Polymer and LAMP Ceramics Synergy for Superior Solid-State Li-Na Hybrid ion Batteries	Jenisha Gunamony	Ming Chi University of Technology	Masashi Kotobuki, Jenisha Gunamony
A7	0082-S	Preparation of Zinc–Manganese Oxide/Carbon Nanocomposite Electrodes on Electrochemical Performance for Supercapacitors	Jia-Jun Ye	National United University	Jia-Jun Ye, Han-Wei Chang
A8	0126-S	Recovery of Nickel from Waste NFM111 Cathodes of Sodium-Ion Batteries	Ching-Yu Hou	National Chung Hsin University	Ching-Yu Hou, Fan-Wei Liu
A9	0130-S	In Situ Synthesized Supramolecular Organic Network/Carbon Nanotubes Composite as Sustainable Cathode Material for Lithium-ion Batteries	Hao-Wei Chang	National Cheng Kung University	Hao-Wei Chang, Watchareeya Kaveevitchai
A10	0133-S	Closed-Loop Recycling and Recovery of Vanadium Cathodes from Waste Aqueous Zinc-Ion Batteries	Hsing-Kai Tseng	National Chung Hsing University	Hsing-Kai Tseng, Fan-Wei Liu
A11	0135-S	Enhancing Zinc-Ion Battery Performance via Additive Engineering in Amide-Based Deep Eutectic Solvent Electrolytes	Ming-chin Hsieh	National Tsing Hua University	Ming-chin Hsieh, Shih-Ming Lin, Yu-Ting Chen, Bing-Ni Gu, Yu-Lun Chueh
A12	0139-S	Performance Optimization of Mechanochemically Synthesized Na ₃ PS ₄ -xO _x Glassy Solid Electrolyte for Na-ion Batteries	Sen-Ping Hu	National Cheng Kung University	Watchareeya Kaveevitchai, Sen-Ping Hu
A13	0145-S	Synergistic Pore Design in Sulfur/Carbon Composite as cathode materials for Next-Generation Lithium–Sulfur Batteries	Ching-Lun Chen	National Cheng Kung University	Ching-Lun Chen, Sheng-Heng Chung

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A14	0177-S	Enhancing Thermal Stability in All-Vanadium Redox Flow Batteries through Electrolyte Additives	Cen-Fang Cheng	National Tsing Hua University	Cen-Fang Cheng, Hong-Yu Lin, Jui-Hsiung Huang, Han-Yi Chen
A15	0185-S	Synthesis Optimization of LiTa ₂ PO ₈ for Enhanced Lithium-Ion Conductivity	miki shibasaki	Nagoya institute of Technology	miki shibasaki, hayami takeda, masanobu nakayama
A16	0187-S	Electrochemical Behavior and Charge Storage Mechanism of NiCo@3D-Ni for High-Performance Supercapacitors	Chia-Hsiang Lee	National Chung-Hsing University	Chia-Hsiang Lee, Han-Wei Cheng, Yu-Chen Tasi, Yung-Chuan Tseng, Wei-Lu Wu, Sheng-Han Zheng
A17	0230-S	Novolak-Derived Hard Carbon Negative Electrodes for Lithium-Ion Batteries: Closed Pore Engineering via Cross-linking Density of Precursors	Liang-Chieh Tseng	National Tsing Hua University	Liang-Chieh Tseng, Yu-Chun Chen, Yi-Cheng Liao, Chi-Chang Hu
A18	0231-S	Achieving Efficient Sodium Plating and Stripping Performances with a Carbon-Coated Layer	Sheng-Ming Chang	Ming Chi University of Technology	Sheng-Ming Chang, Tai-Feng Hung
A19	0234-S	Dual Filler(MOFs/AL-LLZO) Double Layer Solid State Electrolyte Based on PVDF-HFP	Ming Hui Wang	Ming Chi University of Technology	Ming Hui Wang, Chun-Chen Yang
A20	0242-S	A Zero-Strain and Self-Healing Anode Material for All-Solid-State Sodium Batteries	Qi-Hong Chen	National Cheng Kung University	Qi-Hong Chen, Shin-kang Lin
A21	0249-S	Improving lithium plating and stripping on (220)-orientation nanotwinned copper foils for lithium metal batteries	Hsiang-Sheng Wei	National Tsing Hua University	Hsiang-Sheng Wei, Hao-Yu Ku, Ai-Ling Huang, Hsu Tsou, Chi-Chang Hu
A22	0254-S	The Impact of Electrolyte Additives on Vanadium Redox Flow Battery Performance and Stability	Huai-Wei Pai	National Tsing Hua University	Huai-Wei Pai, Hong-Yu Lin, Jui-Hsiung Huang, Han-Yi Chen
A23	0077	Development and Evaluation of a High-Power Domestic Vanadium Redox Flow Battery	Chien-Hong Lin	National Atomic Research Institute	Chien-Hong Lin, Ning-Yih Hsu, Yi-Hsing Yeh, Ting-Yu Liu
A24	0087	Enhanced Mechanical Strength in Composite Polymer Electrolytes with Inorganic Nanoparticles	Keng-Hao Cheng	CPC Corporation	Keng-Hao Cheng
A25	0150	One-step Hydrothermal Synthesis of Manganese Molybdate@Cobalt Tungstate Nanosheets Hybrid as Advanced Materials for Supercapacitor Applications	Chelliah Koventhan	National Taiwan Normal University	Chelliah Koventhan, AN-Ya Lo
A26	0154	Tantalum-Modified NCMA Cathodes: Dual Functionality for Improved Structural and Interfacial Stability	Juliya Jeyakumar	Ming Chi University of Technology	Juliya Jeyakumar, Manojkumar Seenivasan, Yi-Shiuan Wu, Chun-Chen Yang
A27	0248	Porous structural Li-Na Alloy Anode with Mg doping in the Lithium Metal Batteries	Ciou-Ren Lee	National Cheng Kung University	Ciou-Ren Lee, Chang-Tsun Lee, Pin-Ching Huang, Pei-I Wei, Ying-Da Luo, Yu-Hsiu Chang, Shih-Kang Lin

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A28	0264	Effect of Li/TM variation on High Nickel Cobalt Less NCMA89 Cathodes via Solid State Reaction	Kuan-Zong Fung	National Cheng Kung University	Ying-Yi Chen, Kuan-Zong Fung, Shu-Yi Tsai
A29	0266	Structural and Electrochemical Impacts of Lithium Substitution in P2-Type Na _{0.67} MnO ₂ Cathode Materials for Sodium-Ion Batteries	JHUO,SYUN-YA	National Cheng Kung University	JHUO,SYUN-YA, Kuan-Zong Fung, Shu-Yi Tsai
A30	0272	Fabrication of High-Mass-Loading Ni-Rich Cathodes Using Electrophoretic Deposition on 3D Structured Current Collectors	Chun-Ying Chen	National Cheng Kung University	Chun-Ying Chen, Kuan-Zong Fung, Shu-Yi Tsai

Poster Session (B) Photoelectrochemistry & Solar Cells

#	Abstract No.	Title	Presenter	Institution / Organization	Authors
B1	0036	Evaluation of the optoelectronic dynamics at photoelectrode/electrolyte interface using electrochemical impedance spectroscopy	Kana Ueda	Tokyo University of Science	Kana Ueda, Mutsumi Sugiyama
B2	0050	Decoration of Novel Molybdenum-based Bimetallic Oxide on Bismuth Vanadate as Photoelectrochemical Catalysts for Efficient Water Oxidation	Chang-Yan Hsieh	National Taipei University of Technology	Chang-Yan Hsieh, Lu-Yin Lin
B3	0100	Surface Plasmon-Assisted Antimony Nanoparticle-Based Photoelectrochemical Sensor for H ₂ O ₂ Detection	Chih Kuang, Lee	National Dong Hwa University	Chih Kuang, Lee, Yu Kuei, Hsu

Poster Session (C) Basic Electrochemistry & Electroplating

#	Abstract No.	Title	Presenter	Institution / Organization	Authors
C1	0035-S	Metal–Organic Framework-Derived Bimetallic Oxides as Electrocatalysts for Water Splitting	MU-HAO-TSAI	National Yunlin University of Science and Technology	MU-HAO-TSAI, Pei-Hsin Young
C2	0045-S	Preparation of transition metal molybdenum carbide on three-dimensional porous nickel foam composite as electrode material for hydrogen evolution reaction	Jia-Yu Li	National Chung Hsing University	Yu-Chen Tsai, Han-Wei Chang, Jia-Yu Li, Chao-Pei Chen
C3	0046-S	Preparation of γ -graphyne for Electrochemical Sensor Applications	Mei-I-Wu	National Chung Hsing University	Mei-I-Wu, Yi-Chun Lin, Han-Wei Chang, Yu-Chen Tsai
C4	0065-S	Iron-Modified Two-Dimensional Metal–Organic Framework as an “Initiator” for Synthesizing Polypyrrole toward Electrochemical Dopamine Sensing.	Hsin-Ya Tsai	National Cheng Kung University	Hsin-Ya Tsai, Cheng-Hui Shen, Meng-Dian Tsai, Yu-Na Chang, You-Chi Liang, Kuan-Chu Wu, Chung-Wei Kung

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Poster Session (C) Basic Electrochemistry & Electroplating

C5	0121-S	2D Continuum Modeling with a Kinetic Degradation Framework for Predicting the Long-Term Stability of OER Electrocatalysts	Bing-Xun Zhong	National Cheng Kung University	Bing-Xun Zhong, Hong-Kang Tian
C6	0165-S	Selective Dispersion of Semiconducting Single-Walled Carbon Nanotubes Using Polythiophene Derivatives for Nanohybrid Channel Materials in Organic Electrochemical Transistors	Guo-Hao Jiang	National Cheng Kung University	Guo-Hao Jiang, Shang-Wen Su, Yan-Cheng Lin
C7	0176-S	Engineered Defect Sites in Mo ₂ TiC ₂ T _x MXene Enable Strong Platinum Anchoring for Enhanced Electrocatalytic Activity	Bo Heng Huang	National Cheng Kung University	Bo Heng Huang, I-Wen Peter Chen
C8	0186-S	Deciphering π - π Interactions in Binder-Free Flexible B-Doped Graphene Paper for High-Performance Supercapacitor Applications	Jia-Yu Ji	National Cheng Kung University	Jia-Yu Ji, I-Wen Peter Chen
C9	0207-S	High-capacitance Tungsten Oxide Composite Film for High-Performance Dye-Sensitized Photo-Rechargeable Ion Capacitors	Kai-Xiang Shi	National Taiwan University of Science and Technology	Kai-Xiang Shi, Li-Xin Huang, An Hsueh, Mia Rinawati, Min-Hsin Yeh
C10	0208-S	Highly Selective Nitrate Sensing at Trace Levels in Neutral Medium Using a Synergistic Cu Nanowires/Fe Graphene quantum dots.	Jung-Hsin Jen	National Taiwan University of Science and Technology	Jung-Hsin Jen, Chieh Li, Pin-Hsuan Lin, Kuan-Jung Chen, Mia Rinawati, Min-Hsin Yeh
C11	0250-S	Highly efficient electroplating of (220)-oriented nano-twinned copper in methanesulfonic copper baths	Chia-Yen Chang	National Tsing Hua University	Chia-Yen Chang, Hsiang-Sheng Wei, Chi-Chang Hu
C12	0297-S	Engineering Cobalt-Based Bimetallic Compounds via NH ₄ F-Directed ZIF67 Transformation for Battery-Supercapacitor Hybrids with Enhanced Energy Storage Performance	I-An Lu	National Taipei University of Technology	I-An Lu, Lu-Yin Lin
C13	0158	Using the Proton/Hydrogen Redox Couple for Thermogalvanic Waste Heat Harvesting	Thanaphoom Yindeesuk	National Taiwan University	Thanaphoom Yindeesuk
C14	0202-S	Localized Microstrain-Induced Lattice Distortion in High-Entropy Prussian Blue Analogues via Graphene Quantum Dots for Enhanced Alkaline Hydrogen Evolution Electrocatalysis	Chen Hsu	National Taiwan University of Science and Technology	Chen Hsu, Yu-Ru Liu, Mia Rinawati, Ling-Yu Chang, Wei-Nien Su, Min-Hsin Yeh

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Poster Session (D) Conversions

#	Abstract No.	Title	Presenter	Institution / Organization	Authors
D1	0048-S	Enhanced Hydrogen Evolution in Alkaline Seawater Using Pulsed-Electrodeposited P-Doped NiMo Alloy	Berhanu Telay Mekonnen	National Taiwan University of Science and Technology	Berhanu Telay Mekonnen, Chen-Hao Wang, Guan-Cheng Chen
D2	0052-S	Designing Binary Transition Metal Alloys and Carbon Nanotube Composites for Urea Electrolysis	Ming-Jie Zhang	National Yunlin University of Science and Technology	Chih-Ning Hsieh, Tzu-Ho Wu, Ming-Jie Zhang
D3	0056-S	Non-Equivalent Iodide Ions Boosting the Bismuth-Based Catalysts to Achieve Industrial Carbon Dioxide Reduction to Formic Acid	Ming- Hsuan Li	National Yang Ming Chiao Tung University	Sung-Fu Hung, Ming- Hsuan Li
D4	0057-S	Metallic Copper Electrocatalysts on Aerogel-Modified Hydrophobic Carbon Paper Enables Efficient CO ₂ Electroreduction	Ya-Ching Chang	National Yang Ming Chiao Tung University	Ya-Ching Chang, Sung-Fu Hung
D5	0062-S	Electronic Structure Engineering of Nickel Single-Atom Catalyst by Phosphorus for Efficient Electrocatalytic CO ₂ Reduction Reaction in a Proton-Rich Microenvironment	Mengstu Etay	Academia Sinica	Mengstu Etay, Li-Chyong Chen, Kuei-Hsien Chen
D6	0066-S	One-dimensional Ag Nanowire for Industrial Electrocatalytic Carbon Dioxide Reduction to Carbon Monoxide	Shuo-Peng Lin	National Yang Ming Chiao Tung University	Shuo-Peng Lin, Sung-Fu Hung
D7	0067-S	Spatial Confinement Effect of SnO ₂ Nanospheres Catalysts Enables Ampere-Level CO ₂ Reduction to Formic Acid and Artificial Photosynthesis system	Chi Kang	National Yang Ming Chiao Tung University	Chi Kang, Sung-Fu Hung
D8	0104-S	Enhanced Electrochemical CO ₂ Reduction to HCOOH via Mn-Doped Cu ₆ Sn ₅ Catalysts Prepared by Electrodeposition	Dang Manh Phuc	Academia Sinica	Dang Manh Phuc, Kuei-Hsien Chen, Li-Chyong Chen, Chih-Hao Lee
D9	0162-S	Can Phase-Change Electrolytes Boost Thermogalvanic Efficiency?	Ting-Ruan,Liao	National Taiwan university	Ting-Ruan,Liao, Cong-Siang Huang, Leigh Aldous
D10	0164-S	Microwave-Assisted Waste PET for Dual Electrochemical Applications in Catalyst and Fuel Development	Wei-Chin Chien	National Taiwan University of Science and Technology	Tzu-Sen Su, Wei-Chin Chien
D11	0179-S	Ce-MOF Derived Phosphide Catalysts for Overall Water Splitting Application	Yin-An Yang	National Cheng Kung University	Yin-An Yang, I-Wen Peter Chen
D12	0251-S	Ligand Precoordination and Self-Sacrificing Template Enable Accessible Asymmetric Ni–N–C Sites for High-Rate CO ₂ -to-CO Conversion	Osama Nasr	National Yang Ming Chiao Tung University	Osama Nasr, Varad Modak, Mengstu Etay, Ching-An Chang, Li-Chyong Chen, Kuei-Hsien Chen

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Poster Session (E) Industry & Management

#	Abstract No.	Title	Presenter	Institution / Organization	Authors
E1	0070	Microwave Chemistry Enables Green and Rapid Polishing of SiC	Li-Wen Wang	National Central University	Li-Wen Wang, Chun-Huang Wu, Hsueh-Wen Chang, Zhang-Wan Wu, Ai-Hsi Hsu, Benjamin Tien-Hsi Lee

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“-S”: Student poster competition

Poster Session (A) Batteries and Storage Devices

#	Abstract No.	Title	Name	Institution / Organization	Authors
A31	0011-S	Highly Asymmetrically Configured Single Atoms Anchored on Flame-Roasting Deposited Carbon Black as Cathode Catalysts for Ultrahigh Power Density Zn-Air Batteries	Yu-Chieh Ting	National Tsing Hua University	Yu-Chieh Ting, Chih-Chieh Cheng, Fan-Yu Yen, Guan-Ru Li, Shao-I Chang, Chih-Heng Lee, Hsin-Yi Tiffany Chen, Shih-Yuan Lu
A32	0032-S	MoS ₂ @CoS ₂ derived from ZIF-67 for supercapacitors	Yu-Xuan Lai	National Yunlin University of Science and Technology	Yu-Xuan Lai, Pei-Hsin Young
A33	0051-S	Electroless Nickel/Tin Plating Surface Modification of Sulfur to Enable High Sulfur Loading in Lithium-Sulfur Batteries	Yu-Pei Chiang	National Cheng Kung University	Yu-Pei Chiang, Sheng-Heng Chung
A34	0053-S	Pore Engineering of Zirconium-Based Metal-Organic Framework for In-Situ Polymerization of Aniline toward High-Performance Supercapacitors with Superior Rate Capability	Tsan-Yu Chuang	National Cheng Kung University	Tsan-Yu Chuang, Chen-Hui Shen, Hsin-Ya Tsai, You-Chi Liang, Kuan-Chu Wu, Chung-Wei Kung
A35	0079-S	Studying the effects of electrolyte additives on the Mn ⁴⁺ /Mn ²⁺ redox behaviors in Zn-MnO ₂ aqueous batteries	Syu-Jin Liao	National Yunlin University of Science and Technology	Syu-Jin Liao, Tzu-Ho Wu, Cheng-Han Cai
A36	0178-S	High-Yield One-Pot Synthesis of Phosphorus-Grafted MXene: Unveiling Phosphate-MXene Interactions through In Situ Structural Monitoring for Energy Storage Enhancement	Yu Hsuan Chang	National Cheng Kung University	Yu Hsuan Chang, I-Wen Peter Chen
A37	0205-S	Synthesis of Inorganic Li ₆ PS ₅ Br Sulfides-Based Solid Electrolytes by High Energy Ball Milling for All-Solid-State Lithium Batteries	Yu Lo	Chung Yuan Christian University	Yu Lo, Yin-Chen Hsu, Wei-Ren Liu
A38	0210-S	Exploring Anisotropic Ion Conduction in Solid Polymer Electrolytes	Shun-Jih Yang	National Taiwan University	Shun-Jih Yang, Yu-Chi Wang, Chia-Chin Chen
A39	0223-S	Standard Coin Cell Integration for Aluminum-Sulfur Batteries via Corrosion-Resistant Coatings	Ying-Ching Yang	National Cheng Kung University	Ying-Ching Yang, Sheng-Heng Chung,
A40	0233-S	Interfacial Engineering of a Conductive and Sodiophilic Nucleation Layer for Uniform Sodium Plating and Stripping	Yi-Yang Xu	Ming Chi University of Technology	Yi-Yang Xu, Sheng-Ming Chang, Tai-Feng Hung

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Poster Session (A) Batteries and Storage Devices

A41	0055	Reduced graphene oxide/NiO/Co ₃ O ₄ /cellulose composite film with excellent flexibility and electrochemical performance for supercapacitor electrodes	Wei Jia Wu	National University of Tainan	YANG-MING LU, Wei Jia Wu
A42	0072	Facile Synthesis of Trimetallic Compounds Based on Cobalt and Nickel with Ammonium Fluoride-Based Complex for Energy Storage Applications	Pei-Chen Kuo	National Taipei University of Technology	Lu-Yin Lin, Pei-Chen Kuo
A43	0075	Enhanced sodium-ion conductivity in doped Na ₅ YSi ₄ O ₁₂ : An electrochemical study	Mohamed M. Abdelaal	Ming Chi University of Technology	Mohamed M. Abdelaal, Vinoth Packianathan Thangam, Masashi Kotobuki
A44	0080	Development of Novel Iron Oxide/Fe-MOF Composites via In-situ Growth for High-Efficiency Battery Supercapacitor Hybrids	Yu-Min Wang	National Taipei University of Technology	Yu-Min Wang
A45	0101	A Study of Developing the Structural, Thermal, and Electrochemical Properties of Plasticized Chitosan/ZnO-based Nanocomposite Polymer Electrolyte membranes	Qamber Ali	Chulalongkorn University	Qamber Ali, Kanoktip Boonkerd
A46	0102	Electrochemical Performance of BiVO ₄ Nanostructures as Photo Supercapacitor Electrode Material by Crystal Facet and Morphology Regulation Using pH-dependent	Muhammad Asim Abbas Khan	Chulalongkorn University	Muhammad Asim Abbas Khan, Prasit Pattananuwat
A47	0110	Can Thermogalvanic Cells Be Used to Co-Generate Electricity During Heat Transfer?	Pin-Ruei Li	National Taiwan University	Pin-Ruei Li, Cong-Siang Huang, Ting-Ruan Liao, Leigh Aldous
A48	0129	Enhancing the Supercapacitor Performance of β -Ni(OH) ₂ through Co/Mn Co-doping	WEI-CHENG HUANG	National University of Tainan	YANG-MING LU, WEI-CHENG HUANG
A49	0136	Novel Design of NiS ₂ and V ₃ Ni(SO ₄) ₄ · 24H ₂ O Composites with Controllable Synthetic Temperature and Duration as an Efficient Active Material for Battery Supercapacitor Hybrids	Min-Hua Tsai	National Taipei University of Technology	Min-Hua Tsai, Lu-Yin Lin
A50	0191	A synergistic ternary hydrated eutectic electrolyte strategy realizes high reversibility and high cyclability of zinc metal anodes	Ming-Hsien Lin	National Defense University	Hsiao-Chun Huang, Yu-Chun Huang, Ming-Hsien Lin
A51	0238	First-Principles Investigation of V-Doped MoO ₃ Anodes for Enhanced Zn-Ion Battery Performance	Thanh Tuan Nguyen	National Cheng Kung University	Thanh Tuan Nguyen, Ngoc Thanh Thuy Tran

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A52	0255	Investigation of the effect of SO_4^{2-} , PO_4^{3-} and Zinc acetate for suppression of water evaporation, lowering of corrosiveness, and expansion of electrochemical stability window	Yu-Chun Fu	National Chung Cheng University	Yu-Xiang Huang, Yu-Chun Fu
A53	0261	Preparation of high-voltage solid-state lithium-ion batteries and measurement of electrochemical properties	Yi-Qi Chen	Yuan Ze University	Yi-Qi Chen, I-Ming Hung, Debabrata Mohanty, Meng Chiao Ku, Ting-Ya Yang, Jui-Yun Lin, Shu-Min Lin, Tzu Chi Chang, Yun-Chieh Chang
A54	0265	Suppression of Carbonate Decomposition for Better Crystallization and Microstructural Evolution of $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ Garnet Solid Electrolytes	Kuan-Zong Fung	National Cheng Kung University	Chi-Hsiang Shih, Kuan-Zong Fung, Shu-Yi Tsai
A55	0268	Impact of Lithium Extraction on Structure and Impedance Behavior of NCM811 Cathodes	Yu-Hsuan Chen	National Cheng Kung University	Yu-Hsuan Chen, Shu-Yi Tsai, Kuan-Zong Fung
A56	0270	Synthesis of Single-Crystal Ni-Rich Layered Oxide Cathodes for Lithium-Ion Batteries	Kuan-Zong Fung	National Cheng Kung University	Cheng-Kai Huang, Kuan-Zong Fung, Shu-Yi Tsai
A57	0256-S	Selective lithium capture from brines with δ - MnO_2 MXene composite with NH_2 – functionalized graphene oxide through hybrid CDI	Joemer Jr Adorna	National Tsing Hua University	Joemer Jr Adorna, Keng-ku Liu, Ruey-an Doong

Poster Session (B) Photoelectrochemistry & Solar Cells

#	Abstract No.	Title	Presenter	Institution / Organization	Authors
B4	0061-S	Feasibility and Process Parameter Analysis of Using Cystine in Hydrothermal Synthesis of CZTS	Mei-Chen Lin	National Tainan University	Mei-Chen Lin, Yun-Wu Wang, Zhi-Xiang Liang, Ting-Wei Hsu, Wen-Rui Xie
B5	0086-S	Crumpled Reduced Graphene Oxide/ CsPbBr_3 Nanoheterstructure for Efficiency Improvement in Photocatalytic CO_2 Photoreduction	Hao-Wen Tan	National University of Tainan	Hao-Wen Tan, Yuta Nishina, Chun-Hu Chen, Ying-Chih Pu
B6	0106-S	Mitigating Pinholes on Water-Processed Lead Nitrate Perovskites Film via Eco-Friendly Additive Engineering	Wen-Ting Wu	National Taiwan University of Science and Technology	Wen-Ting Wu, Tzu-Sen Su
B7	0116-S	The Effects of Shell Coating on Indium Phosphide Quantum Dots: Impact on Interfacial Charge Carrier Dynamics and Application in Photocatalytic Hydrogen Evolution	Yu-Xiang, Yu	National University of Tainan	Yu-Xiang, Yu, Ying-Chih, Pu

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Poster Session (B) Photoelectrochemistry & Solar Cells

B8	0120-S	Ni Doping and Defects in ZnIn ₂ S ₄ Photocatalysts: Insights into Piezoelectric Response and Hydrogen Evolution via Multi-scale Simulations and Machine Learning Interatomic Potentials	Wei-Xiang Zhou	National Cheng Kung University	Wei-Xiang Zhou, Ming-Yuan Hung, Jih-Jen Wu, Hong-Kang Tian
B9	0123-S	Surface Oxygen Vacancies Engineering on BiVO ₄ Photoanodes for Enhanced Efficiency in Photoelectrochemical Glycerol Oxidation	Hsiao Po-Keng	National University of Tainan	Hsiao Po-Keng, Ying-Chih Pu
B10	0137-S	Efficiency and Stability Improvement of BiVO ₄ via Modified with Cobalt - Manganese Oxyhydroxide (CMOH) Co-catalyst in Photoelectrochemical Water Oxidation	Yen-Lun Kung	National University of Tainan	Yen-Lun Kung, Chun-Hu Chen, Ying-Chih Pu
B11	0159-S	2D ZnIn ₂ S ₄ Nanosheets Coupled with 1D SnO ₂ Nano-architectures for Superior Solar-Driven CO ₂ Photoconversion	Jamil K. Jadoon	National Sun Yat-sen University	Jamil K. Jadoon, Hyeonseok Lee
B12	0161-S	Sustainable Fabrication of Perovskite Solar Cells Using Recovered Lead Iodide	Jin-Wei Chang	National Chung Hsing University	Jin-Wei Chang, Yu-Kai Chen, Fan-Wei Liu, Chieh-Ting Lin
B13	0168-S	Investigation of Surface Moisture Stability in Cation-Doped FA _x MA _{1-x} SnI ₃ Perovskites through Machine Learning Interatomic Potentials and First-Principles Calculations	Yu-Ting Tai	National Cheng Kung University	Yu-Ting Tai, Hong-Kang Tian
B14	0182-S	Recovery of Metal Iodides from Waste Polarizer Films and Lead-Acid Batteries for Refabrication of Perovskite Solar Cells	Jun An-Su	National Chung Hsing University	Jun An-Su, Yu-Kai Chen, Fan-Wei Liu, Chieh-Ting Lin
B15	0293-S	Conductive Polymers as Photo/Electrocatalysts for O ₂ Reduction/H ₂ O ₂ Production	Riku Sawada	Tohoku University	Riku Sawada, Hitoshi Kasai, Kouki Oka

Poster Session (C) Basic Electrochemistry & Electroplating

#	Abstract No.	Title	Presenter	Institution / Organization	Authors
C15	0016-S	AFM-SECM Insights into the Interfacial Reactivity of 2D TMDC Electrocatalysts	Sumangaladevi Koodathil	National Taiwan University	Sumangaladevi Koodathil, Mohammad Qorbani, Sankar Raman, Li-Chyong Chen, Kuei-Hsien Chen
C16	0024-S	Evolution of Ultrathin CoFe-Nanomesh for Oxygen Evolution Reaction: From Slit Pores to Ink-Bottle Pores	Shashank Sharma	Indian Institute of Science Education and Research Bhopal	Shashank Sharmam, Amit Paul
C17	0038-S	Enhancing the Performance of Photo-patternable Organic Electrochemical Transistors via Photocrosslinking Hydrophilic Side Chains	Yun-Cheng Guo	National Cheng Kung University	Yun-Cheng Guo, Jung-Yao Chen, Sin-Rong Huang, Gu-Hao Cai

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Poster Session (C) Basic Electrochemistry & Electroplating

C18	0039-S	Effect of Halogen Atoms on the Electrocatalytic Activity of Iridium-Functionalized Metal–Organic Frameworks for Water Oxidation	Yu-Chi Wang	National Cheng Kung University	Yu-Chi Wang, Shang-Cheng Yang, Cheng-Hui Shen, Tzu-Hsien Yang, Chung-Wei Kung
C19	0071-S	Dual-Function Etching for SiC Thinning and Graphene Quantum Dot Synthesis	Pei-Ju Lin	National Central University	Pei-Ju Lin, Chun-Huang Wu, Rong Chen, Tien-Chiang Liu, Ai-Hsi Hsu, Benjamin Tien-Hsi Lee
C20	0099-S	Sonoelectrochemical Nitrided Graphene Nanosheets as Electrocatalysis for Hydrogen Peroxide Sensing	Shi-Zhe Chen	National Kaohsiung University of Science and Technology	Tzu-Chen Huang, Ying-Lung Chen, Shi-Zhe Chen, Chien-Liang Lee
C21	0103-S	Electrodeposited FeCoNiMoW High Entropy Alloy for Electrochemical Nitrate Reduction Reaction (NO ₃ RR)	Wei-Jun Lin	National Taiwan University of Science and Technology	Wei-Jun Lin, Tzu-Sen Su
C22	0141-S	A Study on the Synthesis of CuO–ZnO Nanocomposites via a Simple Aqueous Solution Plasma Process	Pei-Yu Shih	National Chung Hsin University	Pei-Yu Shih, Fan-Wei Liu
C23	0197-S	Tailoring High-Entropy Prussian Blue Analogue-Derived Multimetallic Phosphides on CNTs for Efficient Alkaline Hydrogen Evolution	Rais Fakhirrazin	National Taiwan University of Science and Technology	Rais Fakhirrazin, Yu-Ru Liu, Mia Rinawati, Wuttichai Tanmathusorachai, Ling-Yu Chang, Wei-Nien Su, Wei-Hsiang Huang, Min-Hsin Yeh
C24	0204-S	Comparing Electrodeposited Mg Layers in Phenyl- and Phenolate-Based Electrolytes for Rechargeable Mg Batteries	Yu-Chen Chen	National Tsing Hua University	Yu-Chen Chen, Ying-Chen Wu, Yu-Shan Huang, Peng-Wei Chu
C25	0258-S	Anodizing n-type Si in the Dark by Detachable pn Junction Approach	Rong Chen	National Central University	Rong Chen, Chun-Huang Wu, Hsueh-Wen Chang, Tien-Chiang Liu, Benjamin Tien-Hsi Lee
C26	0026	Plating mode of bimetallic Cu-Sn and Zn-Sn electrodes for enhancing selectivity of electrochemical denitrification toward gaseous nitrogen	Zhi-Lun Wu	National Sun Yat-sen University	Yu-Jen Shih, Zhi-Lun Wu
C27	0089	Enhancing Cu ₂ O Reactivity for Neutral CO ₂ -to-Ethylene Conversion via Pd and Ag Interfacial Promotion	Zhuo-Wen Yang	National Dong Hwa University	Zhuo-Wen Yang, Yu-Kuei Hsu
C28	0175-S	Study on Three-Dimensional Porous MoS ₂ /Ti ₃ C ₂ T _x Heterostructure for High-Performance Non-Enzymatic Electrochemical Uric Acid Sensing	Yung-Chun Kao	National Yunlin University of Science and Technology	Yung-Chun Kao, Yun-Cih Cai, Shih-Han Wang

November 2, Sunday (12:00-14:00)

Poster Session (D) Conversions

	Abstract No.	Title	Presenter	Institution / Organization	Authors
D13	0143	Ru Nanoparticles Anchored on Graphene Oxide/MoSe ₂ Aerogels for Synergistic Water Splitting and Pollutant Degradation	Da-Ren Hang	National Sun Yat-sen University	Pei-Chen Lee, Hui-Chun Huang, Mitch M. C. Chou, Da-Ren Hang
D14	0220	Au Nanoparticle-Modified Bi ₂ Se ₃ Nanosheets for Improved Charge Dynamics and Photoelectrocatalytic Water Splitting	Da-Ren Hang	National Sun Yat-sen University	Ting-Yu Chen, Hui-Chun Huang, Mitch M. C. Chou, Da-Ren Hang
D15	0235	Machine Learning-Driven Composition Optimization of High-Entropy LDHs for Electrocatalytic OER	Chandrasekaran Pitchai	National Chung Hsing University	Chandrasekaran Pitchai, Chao-Fang Huang, Chih-Ming Chen
D16	0239	Harnessing Ni SACs on cogently designed nanofiber-based catalysts for CO ₂ electroreduction	Varad Modak	Academia Sinica	Varad Modak, Osama Nasr, Prof. Li-Chyong Chen, Prof. Kuei-Hsien Chen
D17	0240	Investigation and Optimization of Conversion Processes in Modified Strontium Vanadate Oxide Anodes for Solid Oxide Fuel Cells	Shu-Yi Tsai	National Cheng Kung University	Shu-Yi Tsai, Chi-Yang Liu, Kuan-Zong Fung
D18	0285	Tuning Pd and Cu Molecular Catalysts through Pull–Push and Push–Push Pathways for Selective Chemical Valorization	Endalkachew Asefa Moges	National Taiwan University of Science and Technology	Endalkachew Asefa Moges, Bing Joe Hwang