## Oral Competition Best Award

Topic A: Batteries

Paper no.	Name	Title		
0129	Le-Yen Lin	Kinetics of Mixed Ion-Electron Transport in Composite Electrodes		
0137	Chiu-Neng Su	A First-Principles molecular dynamics study of Li+ solvation structures and reduction Mechanisms in THF/MTHF containing electrolytes for Lithium metal Batteries: Comparative analysis of pristine Li and Li-Al alloy anodes		
0202	Felika Valencia	Enhancing Stability of Anode-Free Lithium Metal Batteries through Dual-Salt Electrolyte Formulation: Inhibiting Aluminum Corrosion		
0281	Rui-Tung Kuo	-Tung Kuo Surface Modification of Ceramic Solid Electrolyte for Lithium Solid State Batteries with Amorphous-LLZO Thin Film		

Topic B: Conversions

Paper no.	Name	Title
0293	Wei-Ting Tu	Cation Effect of Faceted Copper Electroplating under CO2 Atmosphere for CO2 Reduction Reaction

Topic C: Fast Energy Storage Materials and Devices

Paper no.	Name	Title
0112	0112 Qing-Yu Hu	Unlocking the Potential of Lithium–Ion Capacitors: Enhancing Performance Across Room and High-Temperature Conditions with LiBF4 and THP-Based Electrolytes

Topic D: Basic Electrochemistry

Paper no.	Name	Title
0041	Cheng-Che Wu	Cement Host for High-Loading Lithium-Sulfur Cells
0051	Chia-Wei Chang	High-Quality Ta3N5 Photoanode for Photoelectrochemical Application
0090	Shih-Huang PAN	A Multi-Scale Study of Potential-Dependent Ammonia Synthesis on IrO2 (110): DFT, 3D- RISM, and Microkinetic Modeling
0334	Shun-Yu Tsai	Recovery of Used Slurry from Chemical Mechanical Polishing via Electrophoresis Process

Topic E: Photoelectrochemistry

Paper no.	Name	Title
0319	Kazuhiro Shibata	Electroless plating of Ni-P/Nylon Fiber by Supercritical CO2 Catalyzation toward Weavable Devices

## Oral Competition Excellent Award

Topic A: Batteries

Paper no.	Name	Title	
0124	Manoj Kumar	Evaluating the cyclability of biphasic Na3V2(PO4)3/Na3V3(PO4)4 compound in ether-based electrolyte for sodium-ion batteries	
0164	Ulya Qonita	Spontaneous Lithium Corrosion with a Tetraglyme as an Electrolyte Solvent in Li-CO2 Batteries	
0197	Yu-Ting Tai	Revealing the Inhibitory Impact on Li-ion Transport Arising from Co Diffusion at Solid Electrolyte LATP and Cathode LiCoO2 Interface	
0238	Saravanan Ashok vallal	Ni Single-atom catalyst's Crosstalk effect in Li–S Batteries: NiPc vs Ni-NC	
0268	Ting-Yu Wang	High-Performance Electrolytic Zn  MnO2 Battery Enabled by MOF-801 Coating	

Topic B: Conversions

Paper no.	Name	Title
0121	Kang-Shun Peng	Spatial Confinement Enhancement and Orbital Modification of CopperAluminum Alloy Encapsulated within Carbon Nanofibers for Ampere-Level Carbon Dioxide Reduction Reaction

Topic C: Fast Energy Storage Materials and Devices

Paper no.	Name	Title
0176	Yu-Hsuan Chiu	Synthesis of Ni-Co prussian blue analogous nickel-free precursor on nickel foam as a binder-free electrode for high-efficiency

electrocapacitive	materials	for	battery
supercapacitor hybr	rids		

Topic D: Basic Electrochemistry

Paper no.	Name	Title	
0070	Junan Wang	Enhancing the Efficacy of Organic Dye Degradation using Gold-Decorated ZnFe <sub>2</sub> O <sub>4</sub> Nanocrystals under Visible Light Irradiation	
0131	Liang-Ting Wu	Electrolyte Design Principles for Li-Metal Batteries: An Electrochemical Perspective Using DFT, AIMD, and Machine Learning	
0246	Bushra Rehman	3D WS <sub>2</sub> /WSe <sub>2</sub> Heterostructures: A Novel Platform for Enhanced SERS and Hydrogen Evolution Reaction Applications	
0316	Bing-Chen Gu	Artificial Intelligence-Assisted Electrochemical Detection of Short-Chain Fatty Acids	

Topic E: Photoelectrochemistry

Paper no.	Name	Title
0234	Hsiang-Sheng Wei	Highly Efficient Electroplating of (220)-oriented Nano-twinned Copper in the Methanesulfonic Copper Baths