[TS07W2]

Nanotechnology for Eco-Friendly Energy Generation/Storage 2

Date & Time	July 8(Wed.), 2026 / 15:50-18:20
Place	Room 205
Session Chair(s)	Prof. So Youn Kim (Seoul National University)

TS07W2_I_1 ***Invited** 15:50-16:10

Polymer-Based Strategies for High-Energy-Density Batteries

Soojin Park

(Pohang University of Science and Technology)

TS07W2_I_2 ***Invited** 16:10-16:30

Interfacial Regulation Strategies for High-Performance Anode-Free Metal Batteries

Jinkwang Hwang, Di Wang, and Kazuhiko Matsumoto

(Kyoto University)

TS07W2_I_3 ***Invited** 16:30-16:50

Novel Methods for Non-Destructive Monitoring Along the Dry Battery Electrodes (DBE) Production Chain

Martin Schulze, Susan Walter, Maren Rake, Till Schulze, and Henning Heuer

(Fraunhofer Institute for Ceramic Technologies and Systems)

TS07W2_I_4 ***Invited** 16:50-17:10

Advanced Dry Powder Processing and Scale-Up Solutions for Sustainable Dry Battery Electrode (DBE) Manufacturing

Eui-Chan Jang and Dong-Hyun Yun

(NANOINTECH Co., Ltd.)

TS07W2_O_5 17:10-17:20

Rheological Design Strategies of Polymer Binders for Next-Generation Solvent-Free Electrode Processing

Kyung Jin Lee and Woo-Jin Song

(Chungnam National University)

TS07W2_O_6 17:20-17:30

Understanding Reaction Dynamics for Developing High-Performance Composite Electrodes for Li-Ion Batteries

Minkyu Kim

(Inha University)

TS07W2_O_7 17:30-17:40

Optimization of Rate Capability for High-Mass Loading Electrodes via Electrolyte Engineering

Jiwon Youn, Jimin Park, and Nam-Soon Choi

(Korea Advanced Institute of Science and Technology)

TS07W2_O_8 17:40-17:50

Coupling Materials Engineering with Electrochemical Behavior toward Practical High-Performance Graphite-Silicon Anodes

Jae Hong Choi and Pilgun Oh

(Pukyong National University)

TS07W2_O_9 ***YSA Applied** 17:50-18:00

PTFE Fibrillation Mechanisms in Solvent-Free Li-Ion Battery Cathode Powder

Eunheui Gwag and So Youn Kim

(Seoul National University)

TS07W2_O_10 ***YSA Applied** 18:00-18:10

Interface-Adaptive Self-Healing Binder Enabled by Dynamic Interactions with Enhanced Cycling Ability for Si/C Composite Anodes

Van-Phu Vu[1], Hye-Mi So[1], Areum Kim[1], Jin Young Lee[1], Abin Kim[1], Minsub Oh[1], and Seungmin Hyun[1,2]

([1]Korea Institute of Machinery & Materials, [2]University of Science and Technology)

TS07W2_O_11 18:10-18:20

Advanced In-Situ X-Ray Characterization for Energy Conversion and Storage Devices

Min-cheol Kim

(Pusan National University)