

[TS01W1]

Nanotechnology for Energy Harvesting I

Date & Time	July 3(Wed.), 2024 / 09:00–10:30
Place	Room 205
Session Chair(s)	Jeong Min Baik (Sungkyunkwan Univ.)

TS01W1_I_1 *Invited 09:00–09:30

Syngas Economy with Green Hydrogen for Rapid Decarbonization of Fuels and Chemicals

Seok-jin Kim¹, Youngdong Song², Javeed Mahmood¹, and Cafer T. Yavuz¹

(¹KAUST, ²Max Planck Institute for Coal Research)

TS01W1_O_2 09:30–09:45

Highly Efficient Single Atom Catalyst for Electrochemical CO₂ Reduction to Ethanol via Maximizing Atomically Dispersed Copper Sites

Sung Yeol Choi, Chae Heon Woo, Jiho Jeon, Jae Young Choi, and Jeong Min Baik

(Sungkyunkwan University)

TS01W1_O_3 09:45–10:00

Maximizing Efficiency at the Three-Phase Interface in Electrolyzers

Phil Woong Kang, Seokjin Kim, Javeed Mahmood, Anas Bintin, Sarah Aqeel, Hamad Saiari, Issam Gereige, and Cafer T. Yavuz

(KAUST)

TS01W1_O_4 10:00–10:15

Empowering CO₂ Reduction: Optimizing TENG Impedance for Enhanced Power Supply

Do-Heon Kim, Jin-Kyeom Kim, and Jeong Min Baik

(Sungkyunkwan University)

TS01W1_O_5 10:15–10:30

Scalable Fabric Electrode for Electrochemical Catalytic Reaction

Seok-Jin Kim^{1,2}, Ga-Hyeun Lee¹, Jung-Eun Lee¹, Javeed Mahmood², Gao-Feng Han³, Inkyung Baik¹, Changbeom Jeon¹, Minjung Han¹, Hwakyung Jeong¹, Cafer T. Yavuz², Han Gi Chae¹, and Jong-Beom Baik¹

(¹UNIST, ²KAUST, ³Jilin University)