[TS07T3]

Nanotechnology for Eco-Friendly Energy Generation/Storage 3

Date & Time	July 9(Thu.), 2026 / 09:30-11:10
Place	Room 205
Session Chair(s)	Prof. Mikyung Lim (Chung-Ang University)

TS07T3_O_1 09:30-09:40

Decoupled Bulk-Interface Engineering for Efficient and Stable Air-Processed $FAPbI_3$ Perovskite Solar Cells

Taehwan Kim, Jihyun Kim, Geumha Lim, and William Jo
(Ewha Womans University)

TS07T3_O_2 09:40-09:50

Vanadium-Induced Electronic Modulation in FeOOH on Ni Foam for Enhanced Flexible Water Splitting Systems

Haripal Singh Dhayal[1], Jyotiprakash B. Yadav[2], and Nishad G. Deshpande[1]
([1]Indian Institute of Information Technology Surat, [2]Shivaji University)

TS07T3_O_3 ***YSA Applied** 09:50-10:00

Ag-Induced Coherent Twin Boundaries Enable Charge and Phonon Transport Engineering for Enhanced Thermoelectric Performance in $Bi_{0.5}Sb_{1.5}Te_3$

Nirma Kumari[1], Jae Ki Lee[1], Aadil Fayaz Wani[1], Ji Hui Son[1], Jongho Park[1], Jeongin Jang[1], Jaywan Chung[1], SuDong Park[1], and Byungki Ryu[1,2]
([1]Korea Electrotechnology Research Institute, [2]University of Science and Technology)

TS07T3_O_4 10:00-10:10

Reversible and Radiation-Based Dual-Mode Thermal Management Devices

Su Eon Lee, Su-Ho Cho, Hee Han, and Chi Won Ahn
(National NanoFab Center)

TS07T3_O_5 10:10-10:20

Spin-Dependent Energy Conversion Process by CISS Effect

Sunihl Ma
(Sungshin Women's University)

TS07T3_O_6 ***YSA Applied** 10:20-10:30

Air-Gapped Reflectors for Performance Enhancement of Zero-Gap Thermophotovoltaic and Thermophotonic Energy Conversion

Minwoo Choi, Wang Xin, and Bong Jae Lee
(Korea Advanced Institute of Science and Technology)

TS07T3_O_7 ***YSA Applied** 10:30-10:40

Harvesting Thermal Energy from Thin-Film SOFC Using Near-Field Thermophotovoltaic Converters

Namwoo Kim, Seonguk Oh, Wonjong Yu, and Jaeman Song
(Kyung Hee University)

TS07T3_I_8 ***Invited** 10:40-11:00

Laser-Induced-Graphene and Laser-Articulated-Graphite Electronics

Young-Jin Kim, Dongwook Yang, Younggeun Lee, Hyunwoo Kim, Jinwoo Jeon, and Hanku Nam
(Korea Advanced Institute of Science and Technology)

TS07T3_O_9 11:00-11:10

Femtosecond Laser Direct Writing of Sustainable Biomass for Green Energy Storage

Sangbaek Park[1] and Young-Jin Kim[2]
([1]Chungnam National University, [2]Korea Advanced Institute of Science and Technology)