[TS08W2]

Transformative Nanotechnology Solution for Hydrogen Energy and Energy Harvesting 2

Date & Time	July 8(Wed.), 2026 / 15:50-17:50
Place	Room 206A
Session Chair(s)	Prof. Byoung-Hoon Lee (Korea University)

TS08W2_I_1 ***Invited** 15:50-16:20

Ion-Conducting Polymer Membranes and Ionomers: Synthesis, Properties, and Applications

Chulsung Bae
(Rensselaer Polytechnic Institute)

TS08W2_I_2 ***Invited** 16:20-16:50

The Blue Frontier: Sustainable Green Hydrogen from Direct Seawater Electrolysis

Zhen Li, Xucun Ye, Mengting Li, and Lawrence Yoon Suk Lee
(The Hong Kong Polytechnic University)

TS08W2_O_3 16:50-17:05

Toward Practical Hydrogen Production: A Cost-Effective Ni-B-P Electrode with High Efficiency and Durability

Susmita S. Patil[1], Reshma Khandekar[1], Tanuja Ekunde[1], Harshada Yadav[1], Haripal Singh Dhayal[2], Nishad Deshpande[2], and Jyotiprakash B. Yadav[1]
([1]Shivaji University, [2]Indian Institute of Information Technology Surat)

TS08W2_O_4 ***YSA Applied** 17:05-17:20

Diagnosing Electrode Long-Term Stability with Time-Resolved Electrochemical Impedance Analysis

Weiran Zheng[1,2]
([1]Guangdong Technion-Israel Institute of Technology, [2]Technion-Israel Institute of Technology)

TS08W2_O_5 17:20-17:35

Stabilizing Fluorine-Incorporated NiFe-LDH for Real Seawater Electrolysis via Surface Passivation and Structural Modification

I. Khan[1], X. Li[1], M. Sajjad[1], N. Bibi[2], and S. Wooh[2]
([1]University of Nottingham Ningbo, [2]Chung-Ang University)

TS08W2_O_6 ***YSA Applied** 17:35-17:50

Leveraging Machine Learning and Active Motifs-Based Catalyst Design for Discovery of Oxygen Reduction Electrocatalysts for Hydrogen Peroxide Production

Gwonho Yu[1], Dong Hyeon Mok[2], Ho Yeon Jang[2], Hyun Dong Jung[2], Samira Siahrostami[3], and Seoin Back[1]
([1]Korea University, [2]Sogang University, [3]Simon Fraser University)