

[TB3] B. Gas sensors (Materials & Sensing Mechanisms)-5	
Session Date	November 10 (Tue.), 2026
Session Time	15:45-17:25
Session Room	Room B (Conference Room 515)
Session Chair(s)	Prof. Jun Min Suh (Seoul National University), Prof. Tianshuang Wang (Jilin University)

[TB3-1] [Invited] 15:45-16:10

Spatial Atomic Layer Deposition of Metal Oxide Nanofilm and Noble Metal Catalysts for Gas-Sensing Applications

Nguyen Van Hieu, Nguyen Viet Chien, Phan Hong Phuoc, Nguyen Ngoc Viet, Nguyen Viet Huong, and Bui Van Hao

Phenikaa University, Vietnam

[TB3-2] 16:10-16:25

Lattice-Oxygen-Mediated Gas Sensing under Oxygen-Free Conditions in YMnO_3

Nan Ma¹, Mao Huang^{1,2}, Nan Meng^{1,2}, Chuying Yu², Kengo Shimanoe³, and Alexey Vasiliev⁴

¹Shanghai Institute of Ceramics, Chinese Academy of Sciences, China, ²Hunan University, China, ³Kyushu University, Japan, ⁴Dubna State University, Russia

[TB3-3] 16:25-16:40

Mechanochemically Functionalized Waste Plastics for NO_2 Sensing

Yingnan Zhao¹, Huaqiao Tan², Gao-Feng Han¹, and Qing Jiang¹

¹Jilin University, China, ²Northeast Normal University, China

[TB3-4] 16:40-16:55

Engineering a Quantum Dot/Binder Sensor for Room-Temperature Selective Ethyl Acetate Detection

Lanpeng Guo, Liuyanlin Zhang, Yuxin Peng, Wenjian Zhang, Hegeng Li, Hua-Yao Li, Houjin Zhang, and Huan Liu

Huazhong University of Science and Technology, China

[TB3-5] 16:55-17:10

Light-Assisted Chemiresistive and Photoluminescence Gas Sensing in Nanostructured Oxides

Jaroslav Otta^{1,2}, Tea Avarmaa¹, Raivis Eglītis³, Valter Kiisk¹, Martin Hruška², Michal Novotný², Martin Vršata², Andris Šutka³, and Raivo Jaaniso¹

¹ University of Tartu, Estonia, ² University of Chemistry and Technology, Prague, Czechia, ³ Riga Technical University, Latvia

[TB3-6] 17:10-17:25

Interfacial Hydrogen Spillover on $\text{Au/Mn-In}_2\text{O}_3$ with Oxygen Vacancies Boosts Hydrogen Sensing with Ultrafast Response

Yongjie Zhang¹, Hong Zhang¹, Xi Wang², Yanfeng Sun¹, and Geyu Lu¹

¹Jilin University, China, ²Jiangsu University of Technology, China