

[MB2] B. Gas sensors (Materials & Sensing Mechanisms) -2	
Session Date	November 9 (Mon.), 2026
Session Time	14:40-16:20
Session Room	Room B (Conference Room 515)
Session Chair(s)	Prof. Hyoun Woo Kim (Hanyang University), Prof. Tetsuya Kida (Kumamoto University)

[MB2-1] [Invited] 14:40-15:05

Control of Gas Diffusion and Reactivity in Porous Metal-Oxide Gas Sensors Prepared by Ultrasonic Spray Pyrolysis

Taro Ueda and Takeo Hyodo
Nagasaki University, Japan

[MB2-2] 15:05-15:20

YSZ-Based Mixed-Potential H₂S Sensors with La₂CeMO₇ (M = Ni, Mn, Fe) Sensing Electrodes for Sewer Environment Monitoring

Jing He, Zuorong Huang, Lei Wu, Sitong Feng, Jiusheng Cai, JiaJia Zheng, Yue Zhang, Xishuang Liang, Fengmin Liu, and Geyu Lu
Jilin University, China

[MB2-3] 15:20-15:35

Metal Oxide Gas Sensors for Smart Agriculture: From Material Design to Practical Applications

Viruntachar Kruefu¹, Pimpan Leangtanom², Montawat Wiboon¹, Chatchawan Sammana¹, Salintip Jongpongsa¹, Siwakorn Bunnak¹, Sirorat Moollor¹, Anurat Wisitsoraat³, Narong Chanlek⁴, and Kata Jaruwongrungse⁵

¹Maejo University, Thailand, ²Vidyasirimedhi Institute of Science and Technology, Thailand, ³National Science and Technology Development Agency, Thailand, ⁴Synchrotron Light Research Institute, Thailand, ⁵National Electronics and Computer Technology Center, Thailand

[MB2-4] 15:35-15:50

Self-Assembled Monolayer Engineering of SnO₂ Nanowires for Selective Gas Sensing

Hyoungwon Park
Chung-Ang University, Korea

[MB2-5] 15:50-16:05

Adsorption/Combustion-Type Gas Microsensors: Effects of Catalyst Supports (Aluminas) on VOC-Sensing Properties and Mechanism

Takeo Hyodo¹, Yuma Matsuura¹, Genki Inao^{1,2}, Takahiko Sasahara², Yasuhiro Shimizu¹, and Taro Ueda¹

¹Nagasaki University, Japan, ²Yazaki Energy System Corporation, Japan

[MB2-6] 16:05-16:20

Synergistic Morphological and Orbital Engineering of MOF-Derived Co₃O₄ via g-C₃N₄ Templating for Triethylamine Detection

Guoxuan Gu, Yuan Gao, and Geyu Lu
Jilin University, China