

[TA3] A. Biosensors (Biorecognition & Diagnostics)-4	
Session Date	November 10 (Tue.), 2026
Session Time	15:45-17:35
Session Room	Room A (Conference Room 517)
Session Chair(s)	Mr. Shang-Chi Chien (National Yang Ming Chiao Tung University) Dr. Dae-Sik Lee (ETRI)

[TA3-1] [Invited] 15:45-16:10

Smart ELISA for Real-World Applications: From Clinical Diagnostics to Food Safety

Yusuke Fuchiwaki

National Institute of Advanced Industrial Science and Technology, Japan

[TA3-2] [Invited] 16:10-16:35

M13 Bacteriophage-Based Colorimetric Electronic Noses for Complex VOC Discrimination toward Humanoid Olfactory Display

Yujin Lee and Jin-Woo Oh

Pusan National University, Korea

[TA3-3] 16:35-16:50

A Self Developed Intelligent Breathomics Platform based on In₂O₃ Nanocubes for Real-Time Non-Invasive Screening of Lung Cancers

Bailing Li¹, Jiuyu Li¹, Zhenyang Zhang¹, Yan Liu^{1,2}, Ruihua Zhao¹, and Jianping Du¹

¹Taiyuan University of Technology, China, ²Shanxi Institute of Energy, China

[TA3-4] 16:50-17:05

Photo-Assisted Electrochemical Sensing based on TiO₂-Based Nanostructures for the Detection of Biomolecules in Human Fluids

Han-Wei Chang, Ming-Hong Li, and Yan-Hua Chen

National United University, Taiwan

[TA3-5] 17:05-17:20

Probe-Density-Tunable Lateral Flow Detection of microRNA via DSN-Mediated Target Recycling and SSB Capture Using ssDNA/PEG–AuNPs Nanoprobes with Freezing-Assisted Assembly

Guangqing Ren, Xinwei Guo, Zihan Jin, Ping Wang, and Hao Wan

Zhejiang University, China

[TA3-6] 17:20-17:35

An Aptamer-Functionalized Organic Electrochemical Transistor-Biosensor for the Label-Free Detection of Methamphetamine

Zhiyao Wang, Miaomiao Wang, Yuqi Chen, Yanzhen He, Liping Du, and Chunsheng Wu

Xi'an Jiaotong University, China