## 9th GOSPEL Workshop. Gas sensors based on semiconducting metal oxides: novel materials & mechanism analyses & application fields

## Tuesday, 6 August 2024

## <u>Day II, Session II: Chair: Prof. Lin Xu (Jilin university, China), Prof. Noriko Saito (National Institute for Materials Science, Japan)</u> (08:30 - 11:45)

time	[id] title	presenter
08:30	[170] Gas Sensors Using Porous Nanostructure Oxide Semiconductors	SUN, Peng
08:55	[171] Effect of Noble-Metal Addition to Porous SnO2-In2O3 Powders Prepared by Ultrasonic Spray Pyrolysis on Their VOC-Sensing Properties	UEDA, Taro
09:10	[172] Toluene gas sensors based on printed zinc oxide (ZnO) nanoporous layers (NPL) generated by Spark Ablation technique	MAZZOLA, Vincent
09:25	[173] Comparative study on VOCs sensing performance of different indium oxide gas sensors	LI, Xu
09:40	[174] Constructing an olfactory element based on catalytic membrane and gas sensing membrane stacked structure	ZHANG, Shunping
09:55	[175] A sensitive NH3 chemiresistive sensor with wide detection range: employing a MOFderived mesoporous carbon composite with polyaniline	LU, Xiang
10:10	Coffee Break	
10:30	[176] A Multimodal Sensing Network Based on Synergistically Sensitized Polyaniline Composites Strategy for Safety Monitoring in Pesticide Spraying	XU, Lin
10:45	[198] Design and performance study of hydrogen sensor based on gate-sensitized field effect transistor	ZHANG, Huanhuan
11:00	[199] Lattice oxygen in sensing reaction	GAO, Ruiqin
11:15	[179] Carbon Dots-Modified Hollow Mesoporous Photonic Crystal Materials for Sensitivity and Selectivity Enhanced Sensing of Chloroform Vapor	LIU, Junchen
11:30	[178] Ppb-level fuel cell type NO2 sensor based on Nafion proton membrane and Au-Ni/CF sensitive electrode	FENG, Sitong

## Day II, Session II: Chair: Prof. Ke Wu (China University of Mining and Technology, China) (13:00 - 15:15)

time	[id] title	presenter
13:00	[188] Ion-implanted WS2 nanosheets for Gas sensing	SAITO, Noriko
13:15	[202] Inductance-capacitance (LC) based wireless gas sensors for portable applications	YANG, Jianhua
13:30	[189] Stabilizing MEMS MOS gas sensors response through working temperature modulation and signal processing	KRIVETSKIY, Valeriy
13:45	[201] Enhanced and selective CO detection using SnO2 thin film	BALORIA, Vishal
14:00	[191] Pd single atoms supported on defective WS2 nanosheets for ultra-low and highperformance methanol detection at room temperature	ZHANG, Haoshuang

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1.1	[192] E-Field Enhanced Microwave Sensor for High Sensitive Trimethylamine Detection	SUN, Zizhuo
14:30	[193] Design and Synthesis of Microwave Sensor Sensitive Materials Based on Waveguide Resonator	JIN, Quan
14:45	[194] High-performance NO2 gas sensor enabled by Fe, N co-doped GQDs modification and pulse-driven temperature modulation	HAN, Jiayin