



The 1st International Conference on AI Sensors

The 10th International Symposium on Sensor Science

List of Posters

Day 3 - Saturday, 03 August 2024 | 13:00-15:00



Panel NO.	Name	Title
1	Ryusei Fujita	Development of a Student Status Estimation System for High School Classrooms
2	Kaustuv Roy	pH-responsive Nanoparticle-Modulated Cancer Diagnostics and Therapeutics in a Self-distinguishable Mineralized Conductive Hydrogel with Tunable Viscosity and Adhesiveness
3	Gibeom Lee	Ionic spiderwebs for adhesion, actuating, and sensing
4	Donghyun Lee	Triboresistive touch position sensing
5	Xuan Li	A cost-effective triboelectric-assisted sensory actuator designed for intelligent robots and exoskeletons
6	Tianyu Geng	A DRL-Based System Structure to Optimize Parameterized MEMS Design
7	Ko Jaeun	Accelerometer Data Reconstruction Methods in Feature-Fusion CNN Model for Enhanced Human Activity Recognition
8	Tee-Ann Teo	Accuracy Analysis of Urban 3D Point Clouds Generated from Satellite Video Using Dense Image Matching Technique
9	Qian Ru Chan	An Innovative Liquid Metal Ink for AI Healthtech and AI Robotic
10	King-Pong Yu	Boundary Detection System (BDS) for Indoor Wheelchair Training
11	Xiaohua Huang	ClassRoom-Crowd: A Dataset for Crowd Counting in Extreme Conditions with Temporal Continuity and cross-domain baseline results
12	Kavita Jaiswal	Microcontroller-Based Edge ML: Health Monitoring for Sleep & Stress via HRV
13	SeungHui Kim	The development of a multi-input model to improve the classification accuracy of a fall model: Utilizing Three-Axis Accelerometer and Holter ECG Data
14	Chengcheng Lu	The Electrical-Rotated Electrical Capacitance Tomography Image Reconstruction Method based on Transformer Models
15	Sang-Seok Lee	Water Droplet Dirtiness Prediction System Based on LightGBM Learning Algorithm
16	Venkata Abhishek Nalam	Wireless Trolley Tracking System: Optimizing Supermarket Efficiency
17	Kohei Kawamura	Location Estimation of Cardiac Electrical Signal Sources Using Fast-Switching Voltage-Dividing Electrodes
18	Chun-Wei Tsai	A Photonic Crystal-Based Mach-Zehnder Interferometer Filter with Liquid Crystal Material and Micro-Electro-Mechanical System Technology
19	Taiyo Iida	Fabrication and performance evaluation of substrates for SERS using nanostructures derived from insects; biomimetic approach for sensing technology
20	Toshiki Kanemura	Surface-Enhanced Raman Spectroscopy-based Sensors for Biomedical Evaluation of Cultured Vascular Endothelial Cell

		Sheets for Drug-induced Increase in Permeability: Toward the High-throughput Screening of Drug Candidates
21	Umi Yamaguchi	Surface-enhanced Raman spectroscopy and HPLC-SERS for rapid and high-throughput screening of chemical species
22	Jau Yang Wu	Analysis of Temperature-Related Timing Jitter Factors in CMOS Single-Photon Avalanche Detectors
23	Haoyang Sun	MEMS-tunable silicon photonic slot waveguide based phase shifter
24	Po-Liang Liu	Enhancement of NO Gas Sensing Sensitivity in SnO ₂ through Transition Metal Doping: A First-Principles Study
25	Taiming Zhang	Magnetic sensor by 2D magnet CrTe ₂
26	Tae-Young Lee	Optimization of Ultra-Fine-Pitch Flip-Chip Interconnections for Advanced packaging Technologies: A study on Adhesive and Substrate Materials
27	Ziyun Chen	Advanced triaxial magnetoelectric sensors for magnetic anomaly detection
28	Gaukhar Smagulova	Development and Characterization of Gas-Sensitive Composite Materials Based on Carbon Fibers and Metal Oxide Nanoparticles
29	Chanyong Park	Development of an automated vacuum-driven filtration device for enhanced bacterial detection in complex food matrices.
30	Hiroko Yamada	Removal of biofilms that form on sensors and other materials using ultrafine bubbles
31	Dongkyu Lee	Automated rapid PCR system for on-site detection of foodborne pathogens
32	Ruiqi Lim	Evaluation of a Continuous Blood Glucose Sensor's Performance for Hospitalized Patients
33	Shuxian Gao	PH-responsive PANI Thin-film Sensor Based on Etched Fiber Grating
34	Zhimeng Zhao	Surface plasmon resonance alcohol sensor based on MoS ₂ /Au structure
35	Minglu Zhu	An Ultra-thin Self-powered Sensor Using Embedded Microchannels and Liquid Metal
36	Seungha Yoon	Fine-tuning Microwave Sensing Frequency using Flexible Permalloy Ellipses
37	Ying-Hao Chu	Flexible transparent thermal sensor
38	Kouki Kimizuka	Haptic in-sensor computing device made of CNT-PDMS nanocomposites
39	Yusuke Sakaue	Measurement of Students' Interest using Wearable Heart Rate Sensor
40	Fengming Hu	Top-down Assembly of Magnetized Micro-cilia and Conductive Micro-domes as Full Bionic Electronic Skin for Multi-functional Tactile Sensing

41	Sung Yong Kim	Study of Smart Gloves using Cu/PDMS flexible multilayer PCB for AR/VR devices
42	Che Fu Liu	Development of a Wearable Sensing Device for muscular strength of Tibialis Anterior
43	Xiangyang Wang	A Solar-Powered IoT Node Integrating Simultaneous Energy Harvesting and Light Intensity Sensing
44	Ryutaro Maeda	Piezoelectric Vibration Energy Harvesting and Self-powered Wireless Sensors
45	Mustafa Alzaki	Adaptive Lossless Compression Using an Embedded Platform for ECG Signal Processing
46	Qingze Guan	Controllable Arbitrary Spectrum Generator for Advanced Computational Spectroscopy
47	Shimamura Tetsuya	GNN-Based Topology Reconstruction for Distributed Blind Estimation in Sensor Networks
48	Yi Xing Cheng	SpeakMetricsPro—An edge-computing-based feedback device for speaker feedback and analysis
49	Christopher Kok	Canteen Watch—A Multi-Modal Edge Computing Approach for Crowd Detection and Management
50	Yu Takemoto	Development of Magnetic Exploration System with Real-Time Source Localization using a Drone and AI for Unexploded Ordinance
51	Hongqiang Li	Automatic ECG arrhythmia classification using convolutional neural network and bidirectional long short-term memory hybrid approach
52	Carmen Cheh	Detecting Water Pump Inefficiency using Non-Invasive Sensors
53	Hui-Yi Chua	Development of the Identification Power Model Parameters Platform for Quadcopter Drone
54	YongMan Choi	Electrical and Optical Properties of Doped Copper Oxide Thin Films for Photodetectors
55	Fu-Li Hsiao	One-Dimensional Convolutional Neural Network Based Air Pump Fault Recognition Using Soundprint Detection
56	Maojie Wang	Study on excitation-measurement mode of ECT multi-electrode combination and optimization of electrode system
57	Kenghao Chang	Uniformed Personnel Re-Identification in Industrial Environments
58	Chan-Jung Kim	Indirect Sensing Technology for Micro-Scale Crack Detection in Carbon Fiber Reinforced Plastic Structures
59	An-Chi Wei	Monitoring gas characteristics in semiconductor process using modified Hartmann-Shack sensor
60	Seong-Cho Hong	Development of IoT based Hidden Hand Signal Detecting Algorithm
61	Jingkai Zhou	Artificial-Intelligence-Enhanced Metamaterial Waveguide Sensing Platform for Mid-infrared Spectroscopic Analysis

62	Nan Xiang	High-throughput and high-purity separation of malignant tumor cells in pleural and peritoneal effusions using interfacial elasto-inertial microfluidics
63	Weijin Guo	Quantitative Measurement of Fibrinogen Concentration by a Spotting Test on a Paper Microfluidic Device
64	Xiaoyong Fang	A two-axis large-aperture metal-based electromagnetic scanning mirror for LiDAR application
65	Zhiran Yi	Artificial Intelligence Calling for Sensor-actuator integration
66	Uzair Bhatti	Transforming Petrochemical Safety Through AI: Comparative Analysis and Deployment of Visual Analyzer Technologies