



11th International Symposium on Sensor Science (I3S 2025)

List of Posters



Poster Session A

Monday, 17 November 2025 (10:45–11:15, 13:00–15:00 CET)

Session	Number	Author	Title
A	1	Mariya Aleksandrova	Effect of microresistor topology on the sensing characteristics of MoS ₂ -based chemoresistive cortisol sensors
A	2	Anjum Nisar	Graphene Decorated with Tantalum Bromide Clusters for Ammonia Detection at Room Temperature
A	3	Chang-Kyu Kim	Hydrogen Leak Detection via Micro-Pipetted Graphene Sensors on Patterned Silicon Platforms
A	4	José Pedro Santos	Enhanced Gas Sensing Performance of Photoactivated MoS ₂ -Based Resistive Sensors
A	5	Mansoor H. Alshehri	Continuum Modeling of Lithium Interaction with Nanosheets
A	6	Rosa Garriga	Amine-Functionalization of AFM Probes through Oligoglycine Peptide Coatings for Mapping MoS ₂ and Graphene Domains
A	7	María González-Gómez	A Low-Cost Colorimetric HKUST-1 Sensor for ppm-Level Humidity Detection
A	8	Christoph Otto	Low-Cost Fluorescence-Based Device for Detecting Microbial Contamination in Drinking Water Samples
A	9	Sergio Moreno Martín	Machine Learning-Based Dilution Quantification of poly-HRP in ELISA Using SPAD Sensors
A	10	Gregor Michl	SeCaT-meter 600: Prism-based dual channel optical density meter with self-calibration
A	11	Mehdi Torabi Goodatzi	Analyzing plasmonic biosensing characteristics by applying signal processing methods for real-time monitoring of biomolecular reactions
A	12	Petra Bauzon	Biosensing in complex media: development of an anti-fouling biofunctionalization strategy for plasmonic biosensors
A	13	Erica Cavaliere	Rapid DNA-based colorimetric biosensor for Fusarium oxysporum detection
A	14	Joaquim Cezar Felipe	An Impedance Spectroscopy Sensor Leveraging Deep Learning to Predict Bacterial Concentration in Milk
A	15	Tina D'Aponte	Electrochemical biosensor with custom fluidics for DNA detection
A	16	Hamide Ehtesabi	Fabrication of a chitosan/ carbon dots label on the package for monitoring the freshness of food
A	17	Philipp Hähne	Miniaturized Liquid-Junction Ag/AgCl Reference Electrodes
A	18	Alexander Gießel	Small-scale DIY customizable Clark-type Sensor
A	19	Shahpour Alirezaee	Design and Development of a low-cost Prosthetic Arm Controlled by EMG Signals

A	20	Susana de Marcos	Colorimetric optical sensing of nitrosamines
A	21	Hélder Baptista	PDMS-layered water-resistant screen-printed sensors for the evaluation of freshness in packaged salmon
A	22	Jair Adriano Lima Silva	Wideband Vibration Sensor Based on a Low-Cost Sagnac Interferometer
A	23	Sungchan Yun	Phase-dependent droplet spreading for reliable liquid capture on functional sensor surfaces

Poster Session B

Tuesday, 18 November 2025 (10:30–11:00, 12:30–14:30 CET)

Session	Number	Author	Title
B	1	Abubaker M. Hamad	Artificial Intelligence–Powered Nano-Sensor for Detecting Antimicrobial Resistance via <i>mecA</i> , <i>bla</i> NDM, and <i>bla</i> OXA-48
B	2	Vibhor Agrawal	Wearable sensors for measuring head and neck movements for healthcare applications
B	3	Bozhidar Stefanov	Maskless Laser-Assisted Patterning and Electroless Copper Metallization of Flexible Mica Substrates
B	4	Min Young Kim	Defect and Interface Engineering for High-Performance Metal Oxide Gas Sensors
B	5	Sandrine Bernardini-Barakel	UV-light assisted zinc oxide-based gas sensor for relatively low temperature NO ₂ detection
B	6	Lionel Presmanes	Ethanol Sensing Properties of Nanometric Magnesium Ferrite Synthesized by Soft Chemistry
B	7	Petr Kostka	Rare earth-doped tellurite glasses for wide-range non-contact temperature sensing from cryogenic to room temperature
B	8	Jorge Hernando-García	Contact resonance as a novel approach for pollen detection
B	9	Lan Zhang	A MEMS Pirani Sensor with an Ultra-Thin Heat-Sink Gap for Low-Vacuum Pressure Monitoring
B	10	Yash Gupta	Macroporous Silicon Steam Reformer: An Efficient Platform for Hydrogen Production
B	11	Danaa Abdul Aziz Alshammari	The Role of Electrode Geometry Enhances the Performance of Wearable Chemical Sensor: Comprehensive Benchmark against a Commercial Device
B	12	Ismael Benito-Altamirano	A novel multipurpose IoT-enabled colorimetric-nose platform for on-the-go analysis
B	13	Kwangjae Chung	Survey-Based Acceptance and Statistical Analysis of Smart Crane-Safety Systems
B	14	Jesús Lozano	Volatile Organic Compounds (VOCs) and Metal Corrosion in Museums: A Preventive Conservation Approach
B	15	Rani Arielly	The Noise-Nose: Unlocking Molecular Fingerprints through Current Fluctuations in Nanoscale Junctions
B	16	Yi chin Fang	Measurement and evaluation of modulation transfer function of digital image sensors
B	17	Jair Adriano Lima Silva	Enhanced Accuracy and Precision in Plastic Optical Fiber Sensors via Coupled Mechanical Component
B	18	Angela Viviana Alzate-García	Development of a biosensor for the detection of heavy metals in wastewater by right angle deposition (GLAD)
B	19	Ki Deok Eom	Implementing Smart Safety Equipment and Sensors for Crane Operations

B	20	Rodrigo Jeronimo Cruz	Transfer of a graphene monolayer onto Borofloat chips for SERS applications
B	21	Mauricio Moreno-Sereno	SPR-grating sensor functionalised with ZIF-8 for ethanol detection
B	22	Ignacio Raúl Matías	Acetaldehyde detection with resonance – based optical sensors