

Tuesday (16 Sep 2025) – Track 1

Name	ID	Title	Room Location
Dr Jacques Gierak	7	Ionic Liquids and Focused Ion Beams: Are all Ionic Liquids Adequate for Advanced FIB Micro- or Nano-engineering?	Poster Hall
Mr Jakob Nüßlein	20	Plasmonic aluminium nanogap creation by electromigration for plasmonic UV-Nanolithography	Poster Hall
Mr Lukas Lehnert	24	Improved Accuracy in Measuring the Dielectric Constant of Nanoparticles in Electrostatic Force Microscopy	Poster Hall
Dr Mariko Murayama	26	Effect of doping Nb on optical properties of Sea Urchin-like TiO ₂ Photocatalysis	Poster Hall
Dr Wolfgang Hilber	27	PVDF-TrFE with suspended AlN particles: a polymer nano-composite with boosted ferroelectric properties	Poster Hall
Mr Sebastian Lang	28	Fabrication of Ferroelectric PVDF:TrFE Foil via Controlled Dewetting	Poster Hall
Dr Akinobu Yamaguchi	29	X-ray energy dependence of gold nanoparticle synthesis in X-ray radiolysis	Poster Hall
Mr Burak Çoban	40	E-Beam Lithography Process Calibration with Minimum Number of SEM Images using Deep Learning	Poster Hall
Mr Keisuke Okamoto	45	Development of Atomic-size Au-MnO ₂ Decorated Polyaniline Toward Applications in Electrochemical Glucose Sensor	Poster Hall
Mr Zihao Zhao	56	Eco-friendly, bioinspired nanopattern for antifouling: Cicada wing-inspired nanostructures for marine applications	Poster Hall
Mr Koki Yamashita	59	Electrochemical Investigation of [Ru(bpy) ₂ (L)] ²⁺ Complexes for Biosensor Applications: Insights into R _{ct} Reduction Mechanism	Poster Hall
Mr Gakuto Inoue	60	Bactericidal property of COP nanopillars dependent with their size	Poster Hall
Dr Markus Haapala	64	Impact of microfabrication conditions on the oxygen depletion rate of thiol-enes	Poster Hall
Dr Michael Muehlberger	68	Microstructuring of 3D Printed Ceramic Surfaces using Nanoimprint Lithography	Poster Hall
Mr Arjun Moothedath Sethumadhavan	69	Post-etch Surface Modification for Sidewall Smoothing in Deep Reactive Ion Etched Silicon	Poster Hall
Mr Satoshi Fujieda	71	Fabrication of fine metal patterns using solvent-soluble UV-curable resin	Poster Hall
Mr Xuming Zhao	72	Effect of Polyethylene Glycol on growth of Porous Silicon	Poster Hall
Mrs Lucie Borget	75	Study of blob defectivity for different 248nm resist processes: influence of material chemistry, pattern types, bake and development conditions.	Poster Hall
Mr Jeremy Teuber	85	Development of Microfluidic Flow Cells with Integrated Arrays of Freestanding Al ₂ O ₃ Membranes for SEM Imaging	Poster Hall
Dr Jeongdai Jo	86	Fabrication of Flexible Printed In-Mold Electronic Devices	Poster Hall
Dr Masashi Yamamoto	92	Bioinspired Nanospoke Formation on the Surfaces of Commercial Plastic Plates Using Atmospheric-Pressure Low-Temperature Plasma	Poster Hall
Ms Shatavisha Biswas	93	Impact of processing on the temperature-dependant behaviour of nano-structured Platinum thin films fabricated by Spark Ablation	Poster Hall
Ms Yuyan Liu	106	Hierarchical structures fabricated for probiotic marine bacterial growth using hybrid methods for polymer replication	Poster Hall
Dr Etienne Carré	113	Fluorination of Ni Hard masks during Fluorine-Based DRIE: Structural and Spectroscopic Insights into NiF ₂ Formation	Poster Hall
Dr Lewis Keeble	115	On-CMOS 3D Platinum Electrodes Fabricated by Focussed-Ion Beam for Dielectrophoresis of DNA Towards an Electrokinetic Lab-on-CMOS	Poster Hall
Dr Santhosh Pandian	116	Hybrid-Polymer Microring Resonator Arrays for Next-Generation Photoacoustic and Biosensing Applications	Poster Hall
Dr Wei Lyu	118	Femtosecond laser inscription of optical waveguide in sapphire	Poster Hall
Mr Hakseung Lee	119	Plasma Etching of Silicon Oxide and Silicon Nitride at Low Temperature using CF ₄ and CHF ₃	Poster Hall
Mr Baptiste Fischer-kaszuba	123	Effective diffusion barrier for Au/Ni thin films in quartz MEMS processing	Poster Hall

Name	ID	Title	Room Location
Mr Jesper Navne	133	Advanced Si Microfluidic channels: Overlapping and vertical channels.	Poster Hall
Mr Abel Palomas Jiménez	136	Analysis and fabrication of electrothermal electrodes for micro and nanostructured sensors	Poster Hall
Dr Giulia Malvicini	137	Ultra-thick grayscale ellipsoidal structures for X-ray focusing using scanning-laser direct write lithography	Poster Hall
Mr Tatsuhiko Mori	140	Effects of Annealing on Effective Young's Modulus of Ti/Au Multi-Layered Microcantilevers for MEMS Capacitive Accelerometers	Poster Hall
Mr Ji Hwan Han	144	Development of an In Situ Microfluidic System for Real-Time Control of Porous Microspheres Fabrication	Poster Hall
Mr Seong Min Yoon	145	Slippery liquid-infused micropatterned surface for air-lifted analyte membrane formation	Poster Hall
Dr Amandine Andrieux-ledier	147	Mastering the growth of centimetric sp2-hybridized boron nitride films for optoelectronic devices	Poster Hall
Mr Naoya Shibasaki	160	Fabrication of slanted diffraction gratings by electron beam lithography with tilted angle exposure	Poster Hall
Dr Jian Lu	165	Investigation of Pre-Stressed Membranes in Miniaturized Piezoresistive Diaphragm Pressure Sensors for Enhanced Sensitivity in High Vacuum	Poster Hall
Dr Yuichi Kurashima	166	Integration of a metal nano-antenna structure into silicon substrates using surface-activated room temperature bonding	Poster Hall
Mr Mohit Kumar Gautam	167	Interface-Engineered Ferroelectric Tunnel Junctions with Ultra-High TER via Optimized P(VDF-TrFE) Crystallinity	Poster Hall
Dr Jaejong Lee	170	Fabrication of metal nanodot arrays for LSPR biosensors with LOD of 1fg/mL using nanoimprint lithography process	Poster Hall
Dr Atsushi Sekiguchi	176	Study of the high-intensity reflection structure that used the speckle exposure method	Poster Hall
Mr Gaby Bélot	179	Introducing ArF grayscale lithography for large-scale fabrication of submicronic 3D structures	Poster Hall
Ms Busra Oyku Alan	181	MoTe2-Based Memristor Fabrication with Scanning Probe Lithography	Poster Hall
Mr Jeongsik Noh	182	Study on Micro Scale Surface Polishing and Modification of 3D Biodegradable Scaffolds using Electron Beam Treatment	Poster Hall
Mr Shota Iima	183	Micro-Mechanical Properties of Annealed Electrodeposited Gold for Design of MEMS Structural Components	Poster Hall
Mr Nico Rademacher	202	Scalable manufacturing processes for solid-state nanopores using Atomic Layer Deposition	Poster Hall
Mr Maksim Lipkin	206	The Impact of Writing Field Stitching on Optical Losses in Electron Beam Fabricated Silicon-on-Insulator Waveguides	Poster Hall
Prof Zhuming Liu	209	A Deep Learning-Based Photoresist Shrinkage Correction Method via Fusion of SEM Image and Scanning Parameter Features	Poster Hall
Dr Magdalena Ulmeanu	214	Fabrication and Nanoscale Characterization of Sidewall Roughness in SOI Waveguides	Poster Hall
Dr Anja Voigt	216	Fabrication of hierarchical structures in a grayscale positive photoresist by applying two lithography methods in a single resist film	Poster Hall
Dr Ying Tran	222	200 kV E-beam Lithography for Patterning Thick Resist	Poster Hall
Ms Kangping Liu	230	Large-Scale Integrated Visible/Near-Infrared Multi-Channel Polarizer based on Sub-wavelength Metal Grating	Poster Hall
Ms Qingxin Wu	231	High Resolution Electron Beam Lithography for 10 nm Zone Plates with ultra-high aspect ratio	Poster Hall
Mr Sheng Tao	232	Ultra high resolution and dense SiO2 gratings by electron beam lithography and dry-etch	Poster Hall

Tuesday (16 Sep 2025) – Track 2

Name	ID	Title	Room Location
Dr Ahmad Echresh	15	Ultrafast Single Germanium Nanowire Photodetectors	Poster Hall
Mr Seung wan Jung	46	Substantial Ron,sp Reduction in a 1.2 kV SiC DMOSFET Using a Double -Epi Drift Layer	Poster Hall
Mr Takumi Yamada	53	Development of a uniform cell dispersion structure in microfluidic channels with low cell loss	Poster Hall
Mr Amlan Ashish	62	3D-Printed Microfluidic Device for Biological Application	Poster Hall
Ms Núria Termes Español	73	Tattoo Electrodes for Comfortable and Reliable Masticatory EMG Monitoring	Poster Hall
Dr Sonia Freddi	91	Exploiting the dewetting instability of thin Ge films to develop a novel photonic platform	Poster Hall
Mr Junhwa Seong	95	Mechanically robust spin-on-glass packaging of hydrogenated amorphous silicon for harsh environment applications	Poster Hall
Mr Takumi Suda	99	Dynamic Electrical Conductivity of Ni-P/Nylon Yarns with Different Twist Number for Weavable Device	Poster Hall
Mr Junhwa Seong	101	Crystalline atomic layer–dielectric hybrid metasurfaces for high-efficiency visible metaphotoncis	Poster Hall
Ms Zohreh Hajiabadi	104	Volatile Threshold Switching Characteristics of TiN/TaOx/TiN Selector Devices	Poster Hall
Dr Martin Poblet	112	Hybrid SiO ₂ /Si Pillar-Based Optomechanical Crystals for On-Chip Photonic Integration	Poster Hall
Dr Monica Bollani	114	Silicon-based metasurface polarizer supporting quasi-bound states in the continuum	Poster Hall
Dr Masaki Shimofuri	117	Effect of excitation wavelength on micro-Raman thermometry for suspended silicon MEMS structures	Poster Hall
Ms Lynn Möhring	120	High-performance structures with photoimageable thick film pastes in low temperature cofiring ceramics for mmWave packages	Poster Hall
Mr Michele Gherardi	127	Electrical Behavior of Rectifying and Ohmic Contacts on Lightly n-Doped Germanium	Poster Hall
Mr Min Chul Shin	131	Fabrication of Titanium-based Microneedles Array Using Wire Electrical Discharge Machining	Poster Hall
Dr Pooja P. Kanade	134	Polymer-based MEMS microcantilever and microfluidic system for biochemical detection	Poster Hall
Dr Markus Lunzer	148	Two-photon polymerization as mastering tool for nanoimprint lithography to produce microfluidic test devices	Poster Hall
Dr Javed H. Niazi	151	Engineered magnetic quantum dot nanoprobe for multiplexed, equipment-free Alzheimer’s diagnosis at point-of-care	Poster Hall
Mr Daniyal Khoshmaram	154	Quality Factor Engineering in NIR Optical Metasurfaces Using Ge ₂ Sb ₂ Te ₅ and Graphene	Poster Hall
Mr Debmalya Roy	157	Anomalous mapping between the Surface Charge and Ionic Conductance in Narrow Confinements	Poster Hall
Mr Biswadeep Roy	158	Ultrasensitive, AI-integrated cyber-physical system for patient-specific CYFRA21 -1 biomarker quantification	Poster Hall
Ms Wenjie Wang	178	Broadband Transmission Measurement for Ta ₂ O ₅ Photonic Crystal Waveguide	Poster Hall
Mr Songtao Cai	186	Predicting the performance of a low aspect ratio lamination mixer for nanoparticle precipitation with a digital twin	Poster Hall
Ms Ana Coloma Velez	187	Flexible Humidity Sensors Using IL-Gel Electrolytes	Poster Hall
Dr Fabrice Iacovella	198	Fabrication of planar nanostructured SiC microelectrode arrays for long-lifetime neural interfaces	Poster Hall
Mr Jinyu Guo	199	Sub-wavelength grating polarizers in 1-D array focal plane for ultraviolet polarimetric detection	Poster Hall
Ms Weilin Jin	208	Design and Fabrication of a 100mm-Diameter Pillar Metalens for High-Performance Mid-Infrared Imaging	Poster Hall
Mr Yueyu Guo	215	Quantum Dot-Low Dimensional Material Hybrid Heterostructures for Physically Unclonable Optical Tags	Poster Hall
Mr Gabriel Ferreira	218	Modelling the Heat Distribution in Organ-on-a-Chip Systems Using Integrated Microheaters	Poster Hall
Dr Brilliant Adhi Prabowo	219	Microfabricated Light Pipe for Sustainable and Lithography-Free SPR Sensor	Poster Hall
Mr Nguyen Quang Khanh	94	High-Mobility of Amorphous-Crystalline Phase-Composite Indium Oxide for Thin Film Transistor Applications	Poster Hall

Tuesday (16 Sep 2025) – Track 3

Name	ID	Title	Room Location
Mr Joon Soo Kim	17	Dual-Path Anomaly Detection for Semiconductor Equipment: Toward Sensor-Level Intelligence in Digital Twin Manufacturing	Poster Hall
Mr Gapseop Sim	18	Real-time lesion location detection system using Mu-metal and Hall sensor	Poster Hall
Mr Kyunghwan Joo	23	A Study on Focus Control Improvement in Response to Wafer Table Edge Wear in Photolithography Equipment	Poster Hall
Mr Cesar Perez Dominguez	63	Automated Silicon Wafer Handling for Gravity Effect Compensation in High-Precision Horizontal Metrology	Poster Hall
Dr Xiaoming Teng	65	A 10.94bit resolution measurement circuit for resistive sensors	Poster Hall
Mr Aiden Graham	74	Device Variation Effect Simulation for SnOx Memristor-based Neural Networks	Poster Hall
Dr Mudassir Husain	84	Eco-Friendly Functionalization of Graphene via Spark Ablation for Enhanced NO2 Gas Sensing Applications	Poster Hall
Mr Thomas Emil Le Cozannet	124	Microfabrication and characterization of a Hall-sensor chip for low noise housekeeping data collection from power supply units in spacecrafts	Poster Hall
Mr Kwang Hoon Lee	138	Enhancing Overlay Accuracy through Transformation of Overlay Outliers caused by Wafer Local Defocus in Photolithography Scanner Calibration	Poster Hall
Ms Andrea Carolina Villalvazo-hidalgo	141	Gas Sensors Based on MoS ₂ Quantum Dots Deposited via Drop-Casting for Environmental Monitoring on Microfabricated Platforms	Poster Hall
Mr Jonghyeon Woo	171	Real-Time Wireless Tremor Tracking System with V-Groove Crack Sensor	Poster Hall
Dr Ioannis Raptis	172	Microscope-based Multi-Analyte-Reflectance-Spectroscopy (μ-MARS) for multiplexed label free monitoring of immunoreactions	Poster Hall
Ms Ines Kraiem	191	CNFET fabrication for NO2 gas sensor recovery with local electrode heating	Poster Hall

Tuesday (16 Sep 2025) – Track 4

Name	ID	Title	Room Location
Ms Somayeh Maghsoomi Taramsari	11	Selective Electrochemical Aptasensor Using Methylene Blue for Pseudomonas aeruginosa Detection in Mixed Bacterial Cultures	Poster Hall
Ms Hyunjung Kang	50	Water-soluble holographic color prints from UV to visible for sustainable optical security device	Poster Hall
Dr YiHeng Zhao	88	Dual functional filmy device for heat dissipation and power generation based on Bi2Te3 array with topological surface	Poster Hall
Mr Daniyal Khoshmaram	155	A Modeling Study on Inorganic Chalcogenide Transport Layers in Sn-Based Perovskite Solar Cells	Poster Hall
Mr Owen Bell	164	Conformally-coated titanium carbide on structured pyrolytic carbon electrodes for lithium sulphur batteries	Poster Hall
Mr Anirban Roy	203	A deeper dive into droplet and dust dynamics on commercially available solar panels	Poster Hall
Mr Alexandre Chargueraud	213	All-in-one Microfluidic Platform for Single-Cell Environmental Phenotyping of Chlamydomonas reinhardtii	Poster Hall
Ms Akashlina Basu	280	Pen-on-Paper Microfluidics for Fast and Intelligent Detection of Lead in Contaminated Waters	Poster Hall
Ms Somayeh Maghsoomi Taramsari	11	Selective Electrochemical Aptasensor Using Methylene Blue for Pseudomonas aeruginosa Detection in Mixed Bacterial Cultures	Poster Hall
Ms Hyunjung Kang	50	Water-soluble holographic color prints from UV to visible for sustainable optical security device	Poster Hall
Dr YiHeng Zhao	88	Dual functional filmy device for heat dissipation and power generation based on Bi2Te3 array with topological surface	Poster Hall
Mr Daniyal Khoshmaram	155	A Modeling Study on Inorganic Chalcogenide Transport Layers in Sn-Based Perovskite Solar Cells	Poster Hall
Mr Owen Bell	164	Conformally-coated titanium carbide on structured pyrolytic carbon electrodes for lithium sulphur batteries	Poster Hall

Wednesday (17 Sep 2025) – Track 1

Name	ID	Title	Room Location
Mr Qiucheng Chen	235	Auxiliary-Ring-Assisted Fabrication of Hard X-ray Photon Sieves with Low Resist Wettability	Poster Hall
Ms Xunjia Zhao	244	Electron beam-Simulation collaborative fabrication of zone plates with gradient duty cycle	Poster Hall
Prof Ryo Takigawa	246	Room temperature Au-Au die bonding in ambient air via N ₂ plasma treatment	Poster Hall
Mr Jianyao Jin	247	Simulation-guided interpretation of scanning electron microscope images	Poster Hall
Mr Ahmad Ali	248	Manufacturing and testing of ultra-low expansion glass based planar frame resonator	Poster Hall
Mr Markus Gottwald	249	Investigation of Intra-Level Mix-and-Match lithography approach in AR-N 7520new for use in a Mix-and-Match grayscale lithography process	Poster Hall
Ms Lenia Böhm	250	Influence of substrate properties and addition of oxygen on the process of reactive ion etching to optimize the nanopatterning of silicon structures	Poster Hall
Dr Omesh Kapur	259	Interposer Interconnects: An Important Step For Research and Industry	Poster Hall
Mr Yuntian Ye	265	Nanofabrication of monolithically integrated multilayer metasurfaces via fully CMOS-compatible processes	Poster Hall
Ms Eunji Lee	142	Single-Printed Nb2O5 UV-Visible Metasurfaces for Chiro-Optical Holography	Poster Hall
Dr Evangelos Gogolides	279	Plasma-induced periodic surface structures on polymeric microfluidic channel sidewalls	Poster Hall
Ms Yu Ju Han	281	Scalable Multilayer Silicon Anode Architecture with Porosity Control via UV-NIL Roll-to-Plate Process for Enhanced Lithium-Ion Battery Performance	Poster Hall
Mr Bryan Benz	283	First results on vacuum-gas-controlled metal assisted chemical etching	Poster Hall
Mr Sebastian Schermer	290	OPTIMIZING RETICLE BASED HIGH THROUGHPUT I-LINE GRAYSCALE PROJECTION LITHOGRAHPHY FOR 3D STRUCTURES	Poster Hall
Mr Lukas Paul Lingenfelder	293	Ion Beam Planarization using Low-Viscosity, Non-Volatile Containing Polymer Coatings	Poster Hall
Mr Duarte Silva	295	The role of surface chemistry and morphology on adhesive wafer bonding	Poster Hall
Prof Yuan-jen Chang	299	Sub-diffraction-limited nano-texturing on silicon by ultrafast lasers with MHz- burst mode	Poster Hall
Ms Seo Rim Park	303	Fabrication of Micro-Lattice Filters for Particulate and Gas Emission Reduction	Poster Hall
Ms Cristina Laurini	307	Precise quantification of testosterone in ultra-low concentration ranges by surface-enhanced Raman spectroscopy and machine learning techniques	Poster Hall
Ms Nilüfer Tasli	309	Microfluidic Devices Based on Deterministic Lateral Flow Displacement for Protein Separation	Poster Hall
Dr Hiroki Yamamoto	311	Evaluation of Inorganic-organic Hybrid Resist Materials with ultrafast coherent high harmonic generation (HHG) EUV system	Poster Hall
Mr Shaokai Song	315	Graphene Electrodes for In-plane Electrochemical growth of TMDCs	Poster Hall
Mr Sangmok Kim	317	A Technique for Simultaneous Embedding and Welding of Metal Nanowires on Polymer Surfaces for Flexible Conductors	Poster Hall
Mr Takuto Wakasa	318	Fabrication of a superhydrophobic surface with partially superhydrophilic regions and surface free energy comparison	Poster Hall
Mr Yaonien Tsai	319	Design of an Antireflective Hierarchical Structure Based on Finite-Difference Time-Domain (FDTD) Simulation	Poster Hall
Mr Yenen Juan	324	Fabrication of Broadband Antireflection Hierarchical Micro/Nano Structures Using Colloidal Lithography	Poster Hall
Dr Silvia Diewald	326	An e-beam lithographer's approach to evaluating a new HIMT DWL66+ direct laser writer for Mix&Match processes – resists, contrast curves, grayscale lithography, alignment, and developer test sticks	Poster Hall
Ms Yixuan Zhao	330	Direct data generation of wafer-scale metalens for e-beam exposure	Poster Hall
Mr Jiale Zeng	331	Impact of PEALD Temperature on Al ₂ O ₃ Gate Dielectric of ZnO-TFTs	Poster Hall
Ms Yaxin Zhan	335	Plasma-enhanced ALD of ultra-thin Al ₂ O ₃ films for passivating contacts	Poster Hall

Name	ID	Title	Room Location
Ms Valeria D'errico	339	Inducing piezoelectricity in chitosan films by cathodic electrodeposition: challenging a new approach for wearable sensors' fabrication	Poster Hall
Dr Atsushi Sekiguchi	342	Synthesis of novel EB resist based on KrF resist system	Poster Hall
Dr Anna Casimiro	348	Nanofabrication of Large, Stitch-free Diffractive Optics	Poster Hall
Dr Kristian Stockbridge	349	Secondary particle detection for deterministic single ion implantation	Poster Hall
Prof S. O. Reza Moheimani	353	Control of the Scanning Tunnelling Microscope Based on Hybrid Gain Integrator Systems (HIGS)	Poster Hall
Mr Gabriele Petitto	359	Towards single-electron devices based on SOI silicon nanowires: simulation and fabrication	Poster Hall
Prof Zhuming Liu	360	A YOLOv8-Based Defect Inspection for Semiconductor	Poster Hall
Dr Javier Bravo Larrea	361	Two-dimensional arrays of InAs nanodots grown on inverted pyramid Si templates	Poster Hall
Dr Anya Grushina	362	EBIC measurement of the minority carriers diffusion length in a GaAs solar cell p-n junction	Poster Hall
Dr Aslanidis Evangelos	365	Preparation of Regrowth Interfaces in AlGaIn/GaN Heterostructures Using Atomic Layer Etching for Ohmic Contact Formation	Poster Hall
Mr Dai Ai	370	Fabrication of coupled silicon nanoelectromechanical resonators with heavily doped silicon towards reservoir computing chip	Poster Hall
Ms Maria Teresa Elenes Cervantes	375	Vapor Phase Infiltration in Homopolymers and Block copolymers: A comparative study	Poster Hall
Dr Paloma Tejedor	391	Epitaxial growth of InAs/InGaAs-Al nanowire hybrids for quantum computing applications	Poster Hall
Dr Lucjan Grzegorzewski	393	Nanomechanical Mass Sensor: Integrating Nanoimprint Lithography with Flow-Through Gas Phase Deposition	Poster Hall
Ms Magdalena Kucharska	397	Advanced AFM Metrology of Vertical Structures: Sample Reorientation for Sidewall Surface Access	Poster Hall
Dr Michael Haslinger	398	Nanoimprinted Multimode Polymer Waveguides with Integrated Bragg Gratings for Structural Health Monitoring	Poster Hall
Dr Michael Haslinger	399	Processing Pathways for Transparent, Flexible Electrodes in Next-Generation Smart Windows	Poster Hall
Ms Itishree Panda	403	Electrochemically growing morphology on micro structured 3D frameworks	Poster Hall
Dr Jeongdai Jo	408	Micro/Nano Thin-Film Coating Processes of Carbon Materials for Energy Devices	Poster Hall
Dr Luca Pellegrino	412	Bulk Micro-Machining of SrTiO3 Substrates for Device Applications	Poster Hall
Dr Sonia Freddi	414	Towards EUV lithography with alternative sources: a proof-of-concept high-harmonic generation in gas-filled hollow waveguides driven by ultrafast infrared laser pulses	Poster Hall
Mrs Poojitha Sammeta	423	Medusa 84 SiH ₄ , an alternative HSQ resist for realizing DFB lasers diodes	Poster Hall
Mr Robin De Bruijn	425	Integrated Microfabrication Capabilities for Life Science Applications: From Polymer Platforms to Active Micropumps	Poster Hall
Dr Martina Paraggio	433	Engineering soft nanoscale surfaces force material interaction study	Poster Hall
Mr Oisín Fitzgerald	434	Isotopically pure Silicon-28 thin films for improved coherence times in silicon quantum technologies built by scanning tunnelling microscopy	Poster Hall
Mr Kun Zhang	436	Ultra-thick HSQ Resist for Optical Waveguide Grating Coupler Applications	Poster Hall
Mr Daniel Adeyemi	437	Integration of Interband Infrared Cascade Photodetector onto a SOI Platform for Gas Sensing	Poster Hall
Mr Jáchym Podstránský	443	Biofabrication of 3D Scaffolds and Functional Microstructures Using Two- Photon Lithography	Poster Hall

Wednesday (17 Sep 2025) – Track 2

Name	ID	Title	Room Location
Mr Hao Quan	221	The modulation of X-ray by high resolution zone plates when volume diffraction effects dominate	Poster Hall
Mr Yangyu Duan	233	Microfluidic Mixing Induced by the Blinking-Two-Cilia System	Poster Hall
Mr Marco Buzio	242	Neurohybrid interfaces via microstructured conductive hydrogels	Poster Hall
Dr Sadhana Tiwari	243	Micropillars Based PDMS Lab-On-chip Device for Tryptic Digestion of Proteins for Proteomics	Poster Hall
Ms April Logan	252	Method for high phase accuracy trimming of MZIs via Ge ion implantation and electrical annealing	Poster Hall
Mr Kushal Swamy	256	Microcavities to engineer dynamics in coupled E. coli oscillators	Poster Hall
Ms Yuan-Hsuen Chou	257	Manipulation of Liquid Marbles via Triboelectric Charging	Poster Hall
Dr Cyrus Shafai	260	An Extrusion Printed Lorentz Force Actuated Electromechanical Relay	Poster Hall
Mr Tim Erichlandwehr	284	Integrating Surface-Confined Molecular Motors into Microfluidic Platforms: Toward Automated, High-Throughput analysis of Actinomyosin in vitro motility Assays	Poster Hall
Mr Daniyal Khoshmaram	287	Tuning fork optomechanical NIR antenna with integrated optical transmission line	Poster Hall
Dr Chitra Gurnani	291	Low-Temperature Deposition of Metal Chalcogenides via Single-Source Precursors for Flexible Electronics	Poster Hall
Mr Herbert Atrian-Garcia	292	Application of Integrated Electrode Fabrication Technique in Microfluidic lab-on-a-chip Devices for Single-Cell Analysis	Poster Hall
Mr Tomoya Higashi	301	Preparation of Biocompatible Ag/Nylon Yarns Fabricated by Supercritical CO ₂ -assisted Ag Electroless Plating toward Weavable Devices	Poster Hall
Dr Padmalochan Panda	310	Flexible AlScN Piezoelectric Films for Next-Generation Smart Biomedical Sensors	Poster Hall
Mr Yifu Chen	327	Monolithic All-Silicon Ring Resonator for Optical Modulation and Detection	Poster Hall
Mr Leon Seggering	333	InP Nanowire-Based Photoelectrical Detection of Single Particles and DNA in Nanofluidic Systems	Poster Hall
Ms Jia-yi Chen	350	Ultrasensitive Raman Detection via Electrostatic Droplet Manipulation and Laser-Patterned Pinhole Concentration	Poster Hall
Dr Faris Abualnaja	352	Scalable integration of III-V nanowire transistors for NMOS logic	Poster Hall
Mx Laura Lefaix	354	Piezoelectric microdevices for single-cell stimulation via ultrasound-driven ZnO nanosheets	Poster Hall
Dr Alberto del Moral	363	Technological platforms for manufacturing semiconductor qubits	Poster Hall
Mr Phil Grzybeck	371	Double-Spot Detection in Nanochannels Enables Precise Velocity Profiling and Long-Term Stability Monitoring in Passive Micro- and Nanofluidic- Systems	Poster Hall
Mr Yuta Kawashima	372	Synchronization of autonomous vibrating electrostatic MEMS torsional mirrors	Poster Hall
Mr Mengyang Qu	377	Solution-Processed UV-Vacuum-Heat (UWH) Treated Mixed Size Zinc Oxide Nanoparticle Diode-like Device for Ion Sensing Applications	Poster Hall
Ms Anayancy Itzel Villatoro Guillen	379	PEGDA microfluidic-device featuring a Y-type shape for hydrogel microspheres synthesis analysis	Poster Hall
Dr Krzysztof Kwoka	387	Piezoresistivity in FEBID nanowires imaged via opMEMS straining	Poster Hall
Mr Nasser Aldhahri	390	Simulation of contact forces associated with contact wear in MEMS switches	Poster Hall
Dr Luca Pellegrino	410	A Hybrid Superconductor/Nanomechanical Magnetic Field Detector for Biomagnetism	Poster Hall
Dr Keekeun Lee	413	Development of a 3-Channel Solar-Blind UV-C Sensor for Determining Source Location and Intensity	Poster Hall
Mr Ching Chi Lin	417	Electrostatic Manipulation of Low Surface Tension Liquids on Silica Nanowire-based Slippery Liquid-infused Porous Surfaces	Poster Hall
Ms Zhirong PENG	421	Edge Engineering for Intrinsic Cold-metallic Injection Source in 2D FETs	Poster Hall
Mr Trubacs Daniel-Iosif	438	Plasmonic antenna-VO2 hybrid metasurface for all-optical nonlinearity	Poster Hall
Prof Xing Cheng	442	A massive-scale droplet microfluidic platform based on an active matrix of high-voltage thin-film transistors	Poster Hall
Prof Sungjun Kim	447	Vertically-Integrated VRRAM-Based Hardware Reservoir Computing System	Poster Hall
Prof Myounggon Kang	449	Optoelectronic Synaptic IGZO Transistor and Its Demonstration of Electrical and Optical Plasticity for Light-Susceptive Processing-in-Memory	Poster Hall

Wednesday (17 Sep 2025) – Track 3

Name	ID	Title	Room Location
Dr Hao Cao	193	Superhydrophobic Multifocal Microlens Array with Depth-of-Field Detection for Humid Environment	Poster Hall
Mr Kyunghwan Joo	210	Prediction of Photo Lithography Equipment Wafer Moving Robot Errors Using ARIMA model	Poster Hall
Mrs Eleonora Quasso	227	Optimisation of a Microfluidic Electrochemical Biosensor for E. coli Detection via ssDNA Hybridization and CRISPR/Cas -Based Sensing to Combat Sepsis	Poster Hall
Dr Gianfranco Aresta	255	Scalable, Precise, And Reliable positioning of colour centres for Quantum computing and simulation	Poster Hall
Prof Chao-Ching Ho	268	Scalable Nanobubble Generation Using Centrifugal Micro-Porous Mesh Disc Technology	Poster Hall
Ms Nefeli Dimogerontaki	276	Refractive index controllable plasmonic color metasurfaces fabricated by combination of Nanoimprint lithography and Inkjet Printing	Poster Hall
Mr Haoji Yang	306	Machine Learning Enabled Thermoelectric Device Design and Optimization	Poster Hall
Dr Silvia Mena Fernández	314	Flexible, non-toxic SF radiochromic film based on 10,12-PCDA for on-site X-ray dosimetry	Poster Hall
Dr Lars Kool	320	Open Science & Technology: Microfluidic fluid handling	Poster Hall
Mr Pratyusa Mohapatra	346	An Ultrasensitive TDSE/Au/SOD-based Electrochemical Sensing Platform for Real-Time Monitoring of Superoxide Ion at Cellular Level.	Poster Hall
Mr Lianghong Ye	364	Simulation of physical reservoir computing based on nonlinear dynamics of nanoelectromechanical resonators	Poster Hall
Ms Anna Tarasova	373	Microfluidic chip for electrochemical detection of circulating miRNAs: real-sample testing of cardiac disease biomarkers	Poster Hall
Dr Mario Alberto García-Ramírez	385	Optic Fibre Gas Sensor featuring MoS2 QD as an Active Layer	Poster Hall

Wednesday (17 Sep 2025) – Track 4

Name	ID	Title	Room Location
Ms Andreia Santos	296	Development kinetics of photoresist films using trimethyl-ammonium hydroxide (TMAH) aqueous developer contaminated with poly-hydroxy-styrene	Poster Hall
Dr Dimosthenis Ioannou	302	Introducing a new era of green and functional biopolymeric surfaces	Poster Hall
Dr Klaus Zimmer	366	Pattern transfer by laser ablation: demonstration of a vacuumless process for micropatterning from lithographic masks	Poster Hall
Dr Klaus Zimmer	368	Etching of optical glass by reactive plasmas at atmospheric pressure	Poster Hall
Mr Mukhammed Kenzhebek	381	From Waste to Resource: Engineering End-of-Life Graphite Anodes for Solid-State Hydrogen Storage	Poster Hall
Dr Ivan Ling	406	Low-Waste Fabrication of Flexible Carbon Electrodes: Capacitance Comparison of Inkjet-Printed and Laser-Induced Graphene with Ag Nanoparticles	Poster Hall
Dr Philip Calado	426	Mobile Ions Improve the Power Conversion Efficiency of Perovskite Solar Cells with Large Energetic Offsets	Poster Hall
Dr Oliver Williams	427	Heterogeneous Integration of Diamond	Poster Hall

