

## **Session Program**

**27 September 2026 to 2 October 2026**

## **GADEST 2026**

### **Poster Session - 2**

GADEST 2026 - San Servolo Island, Venice (Italy)

# Tuesday 29 September

19:00

## Poster Session - 2

Poster Session | Location: Grecale Hall E

**Atomic structures and stability of large-sized vacancy clusters and finite-size extended interstitial defects in silicon: A neural-network potential and first-principles study**

**Speaker**

Prof. Koji Sueoka

**Deep Level Defects in  $\beta$ -Ga<sub>2</sub>O<sub>3</sub>: Insights from Hydrogenation and Oxygen Annealing Studies**

**Speaker**

Vladimir Kolkovsky

**Detection of nuclei for oxidation induced stacking faults**

**Speaker**

Kaisla Sutinen

**Elaboration of 200 mm GeSnOI via Bonded Etch-Back SOI process**

**Speaker**

Mr Jeremie Chretien

**Synthesis of supersaturated GeSn alloys on Ge and Ge-on-Si by sputter deposition and nanosecond pulsed laser melting**

**Speaker**

Enrico Di Russo

**Defect Engineering and Passivation at Halide Perovskite and Kesterite Nanoparticles Interface: A Combined Experimental and DFT Study**

**Speaker**

Vanira Trifiletti

**Optical Characterisation of Colour Centres in Nitride Layers**

**Speaker**

Ms Amy Albrecht

**Defect Suppression in Boron-Doped MW-PECVD-Grown (113)-Oriented Diamond Substrates for Vertical Power Schottky Diodes**

**Speaker**

Pavel Hazdra

**Oxygen diffusion in Aluminium-Nitride**

**Speakers**

Bracht, Tröger-Neuhaus

**Defect studies and down conversion strategies of double-cation mixed perovskite solar cells**

**Speaker**

Corrado Del Conte

**Multiparametric Control of MAPbI<sub>3</sub> Growth via Low-Vacuum Proximity-Space Effusion****Speaker**

Dr Valentina Arena

**Photo-elastic Characterization of InP Wafers****Speaker**

Martin Herms

**Synthesis of artificial graphene in the AlGaN/GaN heterostructure through block copolymer self-assembly****Speaker**

Anita Patelli

**Towards Scalable Flexible Kesterite-based solar cells: Addressing Bulk and Interface Defects through Drop-on-Demand Inkjet Printing****Speaker**

Prof. Simona Binetti

**Response Surface Modelling for a Vertical GaN HVPE Reactor within a Constrained Design Space****Speaker**

Dr Jiri Tomkovic

**Non-destructive light scattering-based bulk micro defect detection in silicon wafers****Speaker**

Tamás Szarvas

**Ab Initio Modeling of Surface-Induced Effects on Quantum Gate Fidelity in 3C-SiC Divacancy Qubits****Speaker**

Dr Ioannis Deretzis

**Strain-controlled directness and confinement margins in CGeSn/(Si)GeSn MQW emitters on (001) Ge/Si****Speaker**

Walid Belaid

**Novel method to measure the temperature-dependent minority carrier lifetime of crystalline silicon wafers for solar cell applications****Speaker**

Marisa Di Sabatino

**Study of Defect Physics in Zirconia MIM Capacitors****Speaker**

Nishant Saini

**Monolithic GeSn Photodetectors Integrated on Silicon for Mid-Infrared Applications**

**Speaker**

Vincent Reboud

**Impact of Ionic Defects on Mesoporous Perovskite Solar Cells and X-Ray Detectors****Speaker**

Gaetano Calogero

**Estimating recombination-active defect concentrations in silicon n+-p-p+ structures via transfer learning from computer vision models****Speaker**

Prof. Oleg Olikh

**Magnetron-Sputtered HfO<sub>2</sub> Thin Films for Microelectronic and Sensor Applications****Speaker**

Dr VI. Kolkovsky

**Atomic-scale mechanism of step-edge-induced stacking fault evolution during HVPE growth of (100)  $\beta$ -Ga<sub>2</sub>O<sub>3</sub>****Speaker**

Haohan Ye

**Photoluminescence spectroscopy study on hydride vapour phase epitaxy grown GaN:Mn using metal-organic precursor doping approach****Speaker**

Kuei-Shen Hsu

**Lithium-free segmentable hyperpure germanium detector via Pulsed Laser Melting****Speaker**

Francesco Sgarbossa

**Photo electrical characterization of the interface states in dielectric/AlGa<sub>n</sub>/Ga<sub>n</sub> structures****Speaker**

Gabriele Seguini

**Origin and evolution of basal dislocations in HVPE grown GaN****Speaker**

Dr Ulrich Bläß

**Atomic-scale microscopy insights into order and disorder phenomena in Al<sub>x</sub>Ga<sub>1-x</sub>N****Speaker**

Enrico Di Russo

**Identification of the dominant trap states in mixed halide perovskite pellets****Speaker**

Mahsa Masoud

22:00