

## **Session Program**

**27 September 2026 to 2 October 2026**

## **GADEST 2026**

### **Poster Session - 1**

GADEST 2026 - San Servolo Island, Venice (Italy)

# Monday 28 September

19:00

## Poster Session - 1

Poster Session | Location: Grecale Hall E

### **Radiation-induced defect reactions in Silicon Junction Barrier Schottky Diodes upon irradiation with alpha particles in different regimes**

**Speaker**

Dr Vladimir Markevich

### **Electrical Properties of Dislocation-Related Defects in Ge/Si Virtual Substrates**

**Speaker**

Henriette Tetzner

### **Search for stable atomic configurations in SiGe, SiSn, and GeSn alloys using DFT and optimization algorithms**

**Speaker**

Koji Sueoka

### **Superacid-based diagnosis of damage in high-carrier-lifetime crystalline silicon**

**Speaker**

Sophie Pain

### **Surface passivation of silicon by ZnO/Al<sub>2</sub>O<sub>3</sub> stacks with controlled SiO<sub>x</sub> interlayers**

**Speaker**

John Murphy

### **Epi stacking fault defects in highly doped phosphorus 300 mm crystals**

**Speaker**

Matteo Pannocchia

### **Controlled Copper Precipitation for Rapid Point Defect Characterization in Near-Perfect Czochralski Silicon**

**Speaker**

Shuai Yuan

### **Evaluation of impurity effects in magic-angle twisted bilayer graphene by machine learning interatomic potentials**

**Speaker**

Ignazio Vacante

### **Doping Engineering of Double-SOI Structures for Two-Channel Tunneling Transistors**

**Speaker**

Dr Shengqiang Zhou

### **On the formation of local molten regions on Si surfaces by pulsed laser annealing at the melting threshold**

**Speaker**  
Dr SEBASTIEN KERDILES

**Experimental observation and analysis of gliding I3 basal stacking faults in hexagonal germanium**

**Speaker**  
Mette Schouten

**Mechanism of slip line propagation in advanced 300mm silicon substrates**

**Speaker**  
Dr Alexandra Abbadie

**Pulsed Laser Melting for TOPCon technology: new routes to higher efficiency**

**Speaker**  
Francesco Sgarbossa

**Elimination of slip lines induced by the pins in rapid thermal processing for Czochralski silicon wafers**

**Speaker**  
Yilun Wang

**Electric Field Distribution in Black Silicon Needles Under Reverse Bias: A TCAD Simulation Study**

**Speaker**  
Oskari Leiviskä

**Electrically detected magnetic resonance of telecom-wavelength G and C centers in silicon**

**Speaker**  
Alessandro Puddu

**Impact of Substrate Carbon Impurities on MOSFET Breakdown Voltage via Enhanced Phosphorus Out-Diffusion in n/n<sup>+</sup> Epitaxial Wafers**

**Speaker**  
Jinge Wang

**On the gettering properties of isovalent tin and lead impurities in n-type Czochralski silicon**

**Speaker**  
Dr Mykola Kras'ko

**Progress in understanding optically detected magnetic resonance (ODMR) spectra of ASi-Sii-defects**

**Speaker**  
Kevin Lauer

**Theoretical study on the stability of Sn atom in Ge thin film grown on GaSb substrates**

**Speaker**  
Dr Koji Ozawa

**Admittance spectroscopy of organic-silicon heterojunction structures fabricated with ultrasound assistance**

**Speaker**

Prof. Oleg Olikh

**Electrical and Optical Properties of Defect-Enhanced SiGe Heterostructures****Speaker**

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**Infrared properties of a perfectly compensated germanium doped with shallow donors and acceptors below the Mott transition****Speaker**

Dr Sergey Pavlov

**Ge-on-Si Substrates with Porous Silicon buffer as Compliant Layer****Speaker**

Dr Charlotte Weiss

**Elusive point radiation defects in proton-irradiated silicon and germanium****Speaker**

Dr Nikolay Arutyunov

**Optically detected spin properties of the telecom L-band C center in silicon****Speaker**

Shuyu Wen

**Engineering Nanostructured Electrodes on Screen-Printed Carbon for Real-Time Monitoring of Nitrogen-Based Water Pollutants****Speaker**

Dr Roberta Farina

**Experimental and simulated investigation of nitrogen shallow donors in Czochralski silicon wafers doped with nitrogen****Speaker**

Dr Dawid Kot

**Comparative study of void defect annihilation in Si (100) and Si (110) wafers during high-temperature rapid thermal processing****Speaker**

Mr Takuya Kusunoki

**DFT Analysis of Gettering in Si Wafers for CMOS Image Sensors****Speaker**

Dr Iori Takeda

**Unlocking high throughput material discovery on defective interfaces****Speaker**

Dr Artem Musiienko

**Origin of optically active Er<sup>3+</sup> sites in Silicon on Insulator-based photonic waveguides****Speaker**

Yanan Xu

**Structure loss during the Czochralski silicon process: causes, remedies and ML aid**

22:00

**Speaker**

Marisa Di Sabatino