

2nd III-Sb Workshop on structural, electronic and magnetic Characterisation & ESR Checkpoint

26-28 October, 2022

Eindhoven University of Technology, Eindhoven

Wednesday 26 th		
Zwarte Doos (Black Box) Building		
09:00 - 09:30	Registration	
09:30 - 10:30	Time-resolved electrical characterization of semiconductor devices	Dr Martin Paul Geller University of Duisberg - Essen
10:30 - 11:00	Coffee Break	
11:00 - 12:00	Atom Probe Tomography of semiconductor devices and materials (tentative)	Prof Claudia Fleischmann IMEC, KU Leuven
12:00 - 13:00	Lunch Break	
13:00 - 13:30	ESR 1 - Spin-photon interfaces and filters based on tunable III-Sb nanostructures and heterostructures	Giulio Barbieri CSIC-IMN
13:30 - 14:00	ESR 2 - Smart synchrotron nanoprobe investigations of III-Sb devices	Fernanda Malato Praxedes CSIC- ICMM
14:00 - 14:30	ESR 3 – Novel III-Sb quantum materials for photovoltaics	Malte Schwarz Universidad Politécnica de Madrid
14:30 - 15:00	Coffee break	
15:00 - 15:30	ESR 4 - III-Sb charge-storage devices for non-volatile random access memories	Xiuxin Xia Lancaster University
15:30 - 16:00	ESR 5 - Telecoms-wavelength GaSb quantum ring single- photon LEDs	Gizem Acar Lancaster University
16:00 - 16:30	ESR 6 - Advanced electron microscopy of III-V antimonides	Francisco Alvarado University of Warwick
16:30 - 17:00	ESR 7 - Atomic scale characterization of III-Sb quantum materials	Aurelia Trevisan Technical University Eindhoven
Thursday 27 th		
Zwarte Doos (Black Box) Building		
09:00- 10:00	Common electrical and optical techniques for characterising prototype semiconductor devices	Dr Andrew Marshall Lancaster University
10:00 - 10:30	ESR 8 - Magnetic properties of novel III-Sb nanostructures	Julian Zanon Technical University Eindhoven
10:30 - 11:00	Coffee Break	

11:00-12:00	Theory considerations for the connections between structural and optoelectronic properties of Sb-based superlattices and nanostructures	Prof Michael Flatté University of Iowa
12:00 -13:00	Lunch Break	
13:00 - 13:30	ESR 9 - Evolutionary inverse design numerical approaches for improved III -Sb devices	Lucie Leguay Technical University Berlin
13:30 - 14:00	ESR 10 - Development of antimony based interband cascade nanostructures and superlattices	Borislav Petrovic Julius-Maximilians-Universität Würzburg
14:00 - 15:00	Transport to ASML	
15:00 -17:00	Visit to ASML (Please bring valid ID)	
TBD	Dinner in the city	
Friday 28th Flux Building		
09:00 -10:00	Atomic Scale analysis of Sb-containing nanostructures by XSTM	Prof Paul Koenraad
10:00 -10:30	ESR 11 – Multiscale simulation of novel III-Sb quantum materials and devices	Anh-Luan Phan Tor Vergata University
10:30 -11:00	Coffee Break	
11:00 -11:30	ESR 12 - Industrial aspects and upscaling of III-Sb MOCVD technology	Hajrudin Husejini AIXTRON
11:30 - 12:00	ESR 13 - Wafer engineered long wave infrared photodiodes	Chen Liu, IQE PLC
12:00 - 12:30	ESR 14 - Multiband quantum transport in III-Sb based devices	Takuma Sato nextnano GmbH
12:30 -13:30	Carry out lunch	
13:30 - 15:00	Optional lab visit	
End of meeting		