

Training on semiconductor devices, design and manufacturing

Report of Contributions

Contribution ID: 0

Type: **not specified**

Semiconductors Processing and Devices Fabrication - 1st part (crystal growth and epitaxy, thermal oxidation, ion implantation and diffusion)

Monday, 1 July 2013 09:30 (1h 10m)

Presenter: Dr ARENA, Giuseppe (STMicroelectronics)

Session Classification: Semiconductor Manufacturing Processes

Contribution ID: 1

Type: **not specified**

**Semiconductors Processing and Devices Fabrication
–2nd part (Thin film deposition, photolithography,
plasma basics, etching and new trends in
microelectronics industry)**

Monday, 1 July 2013 11:00 (1h 30m)

Presenter: Dr ARENA, Giuseppe (ST Microelectronics)

Session Classification: Semiconductor Manufacturing Processes

Contribution ID: 2

Type: **not specified**

Photolithography and Etching

Presenter: Dr ARENA, Giuseppe (ST Microelectronics)

Contribution ID: 3

Type: **not specified**

TCAD Process and Device Simulations

Monday, 1 July 2013 15:40 (50 minutes)

Presenter: Dr MICCOLI, Cristina (STMicroelectronics)

Session Classification: Electrical Testing, Assembly and TCAD Simulations.

Contribution ID: 4

Type: **not specified**

Electronic Devices Packaging

Monday, 1 July 2013 14:50 (50 minutes)

Presenter: Dr ZIGLIOLI, Federico (STMicroelectronics)

Session Classification: Electrical Testing, Assembly and TCAD Simulations.

Contribution ID: 5

Type: **not specified**

STMicroelectronics Silicon Photomultiplier Technology

Monday, 1 July 2013 16:50 (50 minutes)

Presenter: Dr VALVO, Giuseppina (ST Microelectronics)

Session Classification: Technology Development and Applications

Contribution ID: 6

Type: **not specified**

First Group Visit (19 Participants)

Tuesday, 2 July 2013 08:15 (2h 30m)

Session Classification: Visit to STMicroelectronics M5 8" Clean Room Facilities

Contribution ID: 7

Type: **not specified**

Second Group Visit (19 Participants)

Tuesday, 2 July 2013 10:45 (2h 30m)

Session Classification: Visit to STMicroelectronics M5 8" Clean Room Facilities

Contribution ID: 8

Type: **not specified**

X-Ray Photoelectron Spectroscopy (XPS) and Secondary Ion Mass Spectrometry (SIMS)

Tuesday, 2 July 2013 14:30 (1 hour)

Presenter: Dr RENNA, Lucio (ST Microelectronics)

Session Classification: Surface Analysis and Solids Characterization

Contribution ID: 9

Type: **not specified**

Optical Microscopy, Fault Detection and Isolation Techniques

Tuesday, 2 July 2013 15:30 (1 hour)

Presenter: Dr MELLO, Domenico (ST Microelectronics)

Session Classification: Surface Analysis and Solids Characterization

Contribution ID: **10**

Type: **not specified**

Samples Preparation and Transmission Electron Microscopy (TEM)

Tuesday, 2 July 2013 16:50 (1 hour)

Presenter: Dr MELLO, Domenico (ST Microelectronics)

Session Classification: Surface Analysis and Solids Characterization

Contribution ID: 11

Type: **not specified**

Focused Ion Beam (FIB) and Scanning Electron Microscopy (SEM)

Tuesday, 2 July 2013 17:50 (1 hour)

Presenter: Dr MELLO, Domenico (ST)

Session Classification: Surface Analysis and Solids Characterization

Contribution ID: 12

Type: **not specified**

Welcome and Introduction to the Course

Monday, 1 July 2013 08:45 (15 minutes)

Presenter: Dr MAZZILLO, Massimo (STMicroelectronics)

Contribution ID: 13

Type: **not specified**

The Participants Introduce Themselves

Contribution ID: 14

Type: **not specified**

Conclusions and Debriefing

Tuesday, 2 July 2013 18:50 (10 minutes)

Contribution ID: 15

Type: **not specified**

Registration

Monday, 1 July 2013 08:15 (30 minutes)

Contribution ID: 16

Type: **not specified**

Electrical Parametric Testing

Monday, 1 July 2013 14:00 (50 minutes)

Presenter: Dr SANNELLA, Stefano (ST)

Session Classification: Electrical Testing, Assembly and TCAD Simulations.

Contribution ID: 17

Type: **not specified**

Brief Introduction of STMicroelectronics and Microelectronics Historical Notes

Monday, 1 July 2013 09:00 (30 minutes)

Presenter: Dr ARENA, Giuseppe (STMicroelectronics)

Session Classification: Semiconductor Manufacturing Processes

Contribution ID: **18**

Type: **not specified**

Time-of-Flight PET Detector Development with SiPMs

Monday, 1 July 2013 17:40 (50 minutes)

Presenter: Dr DOLINSKY, Sergei (GE Global Research Center)

Session Classification: Technology Development and Applications