IT-13. Focused ion beam microscopy and techniques

10 September, 16:45 - 18:45 / 11 September, 16:30 - 18:30

IT-13-P-1477

Development of Cryo-FIB technique for the structural characterization of liquid samples

Presenting author: **Tsuchiya M.**

Authors: *Tsuchiya M., Iwahori T., Morikawa A., Nagakubo Y.*

IT-13-P-1484

Finding the needle in the haystack: FIB-SEM combined with array tomography to achieve higher Z-resolution in selected areas

Presenting author: **Wacker I. U.**

Authors: *Wacker I. U., Bartels C., Grabher C., Schertel A., Schröder R. R.*

IT-13-P-1517

Cross sectional sample preparation of nanowires for TEM analysis using FIB

Presenting author: **Lenrick F.**

Authors: *Lenrick F., Ek M., Jacobsson D., Wallenberg L. R.*

IT-13-P-1667

Method For Improving FIB Prepared TEM Samples By Very Low Energy Ar+ / Xe+ Ion Mill Polishing

Presenting author: **Kauffmann Y.**

Authors: *Kauffmann Y., Cohen-Hyams T., Kalina M., Kaplan W. D.*

IT-13-P-1712

Sample preparation using Xenon IC-Plasma FIB: benefits and problems.

Presenting author: **Audoit G**

Authors: *Audoit G, Estivill R, Mariolle D, Blot X, Grenier A, Barnes J P, Cooper D*

IT-13-P-1838

FOCUSED ION BEAM LITHOGRAPHY OF SUBWAVELENGTH PHOTONIC 3D-CHIRAL STRUCTURES

Presenting author: **Artemov V. V.**

Authors: *Artemov V. V., Rogov O. Y., Gorkunov M. V.*

IT-13-P-1861

Measurement of TEM lamella thickness and Ga implantation in the FIB

Presenting author: **Hiscock M.**

Authors: *Lang C., Hiscock M., Dawson M., Hartfield C., Statham P. J.*

IT-13-P-1915

Advances in ex situ lift out

Presenting author: **Giannuzzi L. A.**

Authors: *Giannuzzi L. A.*

IT-13-P-1929

Influence of FIB milling on the determination of sp2/sp3 ratio of carbon materials

Presenting author: **Zhang X.**

Authors: Zhang X., Schneider R., Müller E., Mee M., Meier S., Gumbsch P., Gerthsen D.

IT-13-P-2055

Optimized Detection Limits in FIB-SIMS by Using Reactive Gas Flooding and High Performance Mass Spectrometers

Presenting author: **Eswara Moorthy S.**

Authors: Wirtz T., Dowsett D., Philipp P., Eswara Moorthy S.

IT-13-P-2068

Characterization of carbonaceous contamination and the cleaning capability of atomic hydrogen during focused ion beam processing

Presenting author: **Steiger-Thirsfeld A.**

Authors: Steiger-Thirsfeld A., Basnar B., Tomastik C., Pongratz P., Lugstein A.

IT-13-P-2075

Nanopatterning Plasmonic Structures Using Focused Ion Beam and E-Beam Lithography

Presenting author: **Cohen Hyams T.**

Authors: Cohen Hyams T., Spektor G., Gal L., Orenstein M.

IT-13-P-2432

Optimization of the sample preparation method for semiconductor dopant contrast observation with SEM

Presenting author: **Druckmüllerová Z.**

Authors: Druckmüllerová Z., Kolíbal M., Vystavěl T., Šikola T.

IT-13-P-2440

Channeling contrast: a cost effective alternative to EBSD orientation mapping in scanning focused probe instruments (SEM/FIB) ?

Presenting author: **Langlois C. T.**

Authors: Langlois C. T., Yuan H., Douillard T., Van de Moortele B., Descamps-Mandine A., Blanchard N., Epicier T.

IT-13-P-2481

Cryogenic FIB Lift-out as a preparation method for damage-free soft matter TEM imaging

Presenting author: **Parmenter C. D.**

Authors: Parmenter C. D., Fay M. W., Hartfield C., Amdor G., Moldovan G.

IT-13-P-2485

Characterization of Ga+ FIB Damage in Electron Beam Induced Deposited Platinum, Tungsten and Carbon Chemistries for In-situ S/TEM Sample Preparation

Presenting author: **Van Leer B.**

Authors: Van Leer B., Landin T., Wall D., Roussel L.

IT-13-P-2498

FIB/SEM tomography for 3D visualization of virus infected fibroblasts with TEM-like resolution.

Presenting author: **Villinger C.**

Authors: Villinger C., Neusser G., Kranz C., Walther P., Mertens T.

IT-13-P-2590

Enabling future Nanotomography and Nanofabrication with Crossbeam technology

Presenting author: **Schulmeyer I.**

Authors: Schulmeyer I., Kienle M.

IT-13-P-2616

In situ FIB/SEM micro-compression tests of layered crystals

Presenting author: **Schweizer P.**

Authors: Schweizer P., Niekiel F., Butz B., Spiecker E.

IT-13-P-2701

High performance nanomachining using the new analytical FIB-SEM system

Presenting author: **Jiruše J.**

Authors: Jiruše J., Havelka M., Haničinec M., Polster J., Hrnčíř T.

IT-13-P-2704

Focused ion beam patterning of boron-doped diamond electrodes: Influence of patterning parameters on the heterogeneous electron transfer behavior

Presenting author: **Eifert A.**

Authors: Eifert A., Langenwalter P., Higl J., Lindén M., Nebel C., Mizaikoff B., Kranz C.

IT-13-P-2724

Novel strategies towards faster and smoother FIB cross-sectioning

Presenting author: **Hrnčíř T.**

Authors: Hrnčíř T., Dluhoš J., Haničinec M., Hrachovec V.

IT-13-P-2741

Ultra-Fast Three Dimensional Microanalysis Using the Scanning Electron Microscope Equipped with Xenon Plasma Focused Ion Beam

Presenting author: **Dluhoš J.**

Authors: Dluhoš J., Petrenec M., Peřina P., Reinauer F., Kopeček J., Hrnčíř T., Jiruše J.

IT-13-P-2874

Targeted 3D-CLEM workflow on cultured cells

Presenting author: **Steyer A. M.**

Authors: Steyer A. M., Schieber N. L., Duishoev N., Pepperkok R., Kirmse R., Schertel A., Schwab Y.

IT-13-P-2936

Characterisation of the FIB Induced Damage in Diamond

Presenting author: **Rubanov S.**

Authors: Rubanov S., Suvorova A.

IT-13-P-2986

High quality site specific TEM cross section preparation of structured materials

Presenting author: **Graff A.**

Authors: Graff A., Hübner S., Simon-Najasek M., Altmann F.

IT-13-P-3033

About the accuracy of post-mortem alignment methods in FIB/SEM nano-tomography

Presenting author: **Yuan H.**

Authors: Yuan H., Van de Moortèle B., Epicier T.,

IT-13-P-3258

FIB as Fabrication Tool for Advanced Analytical Infrared Sensing Schemes

Presenting author: **Neusser G.**

Authors: Sieger M., Neusser G., Schaedle T., Kranz C., Mizaikoff B.

IT-13-P-3393

USING THE FOCUSED ION BEAM MICROSCOPE TO DEVELOP DIFFRACTION GRATINGS FOR QUANTUM WELL INFRARED PHOTODETECTORS

Presenting author: **Schmidt W.**

Authors: Rodrigues W., Schmidt W.

IT-13-P-5975

LIFE CELL IMMUNOGOLD LABELLING OF RNA POLYMERASE II visualized by Focused Ion Beam Scanning Electron Microscopy (SEM-FIB)

Presenting author: **Spehner D.**

Authors: Orlov I., Schertel A., Zuber G., Drillien R., Weiss E., Schultz P., Spehner D.

IT-13-P-6027

Structural characterization of hybrid-organic nanocomposites via focus ion beam preparation and electron microscopy

Presenting author: **Ankah G. N.**

Authors: Ankah G. N., Büchele P., Tedde S. F., Adam J., Torrents O., Pfaff M., Poulsen K., Koch M., Gimmler C., Schmidt O., Kraus T.

IT-13-P-6033

Structural and mechanical characterization of human dental tissues across multiple scales at the Oxford Multi-Beam Laboratory for Engineering Microscopy (MBLEM)

Presenting author: **Sui T.**

Authors: Sui T., Ying S., Lunt A. J., Baimpas N., Landini G., Korsunsky A. M.