

NanoDay 2014

Mittwoch 01.10.2014

Vorträge: Appelstr. 4, 30167 Hannover, Multimediahörsaal,
Technische Informatik (Gebäude 3703)
Postersitzung: Schneiderberg 39, 30167 Hannover, Foyer,
Laboratorium für Nano- und Quantenengineering (Gebäude 3430)

Programm

09:15 Begrüßung
09:15 - 10:45 Sitzung I (im Multimediahörsaal)

"Tailoring titanium nanoparticles for photocatalysis"
Armin Feldhoff
Institut für Physikalische Chemie und Elektrochemie

"Magnetic beads – Basics and Applications"
Christine Ruffert
Institut für Mikroproduktionstechnik

"Tuning of disorder in GaAs/AlGaAs quantum wells"
Eddy Patrick Rugeramigabo
Institut für Festkörperphysik, Abteilung Nanostrukturen

10:45 - 11:15 Kaffeepause

11:15 - 12:15 Sitzung II

"Atominterferometer on chips"
Ernst Rasel
Institute of Quantum Optics & Centre for Quantum Engineering
and Space-Time Research (QUEST)

"Multi-scale modeling of biofilm growth"
Meisam Soleimani
MARIO - Multifunctional Active and Reactive Interfaces and
Surfaces

12:20 Konferenzfoto

12:30 - 13:30 Mittagspause

13:30 - 15:00 Postersitzung (im LNQE-Forschungsbau)

15:00 - 15:15 Verleihung des Posterpreises (im Multimediahörsaal)

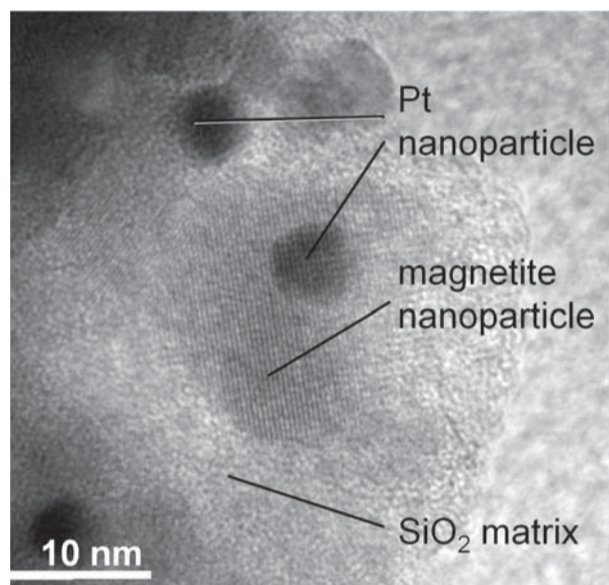
15:15 - 16:45 Sitzung III

"Surface transport in strongly spin polarized systems"
Philipp Kröger
Institut für Festkörperphysik, Abteilung Atomare und Molekulare
Strukturen

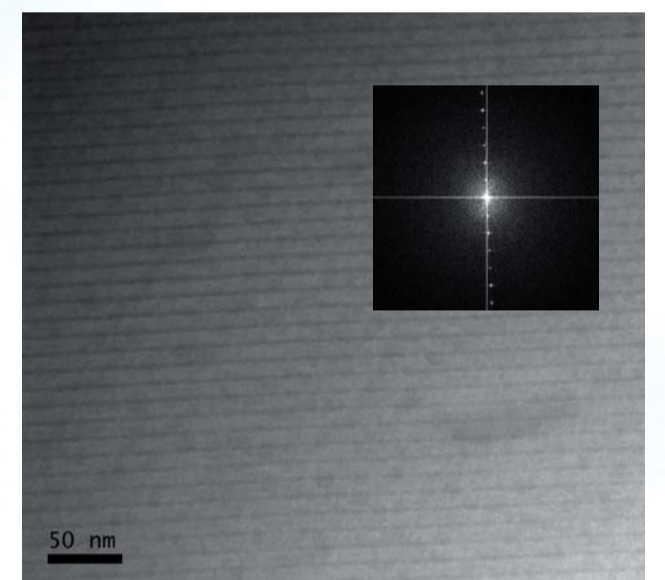
*"Ion implantation of elemental boron and boric molecules for
silicon solar cells"*
Jan Krügener
Institut für Materialien und Bauelemente der Elektronik

*"Understanding adsorption in Zr-organic frameworks:
A computational study"*
Sebastian Lilienthal
Institut für Anorganische Chemie, Arbeitskreis Behrens

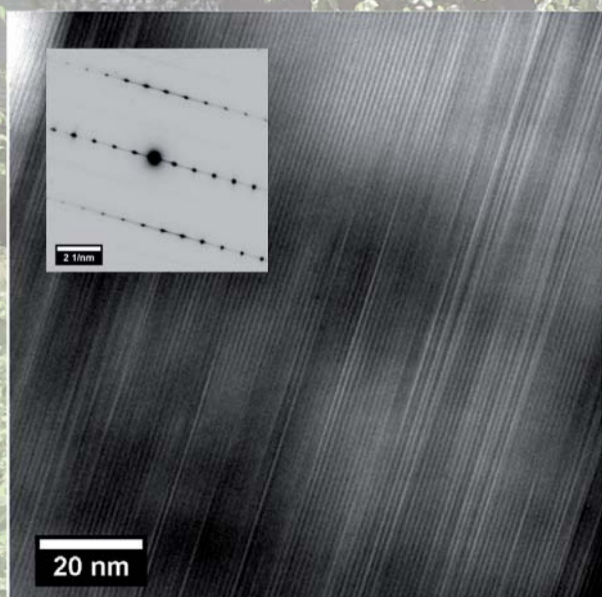
Im Anschluss:
Gemütlicher Ausklang des NanoDay 2014 im LNQE-Forschungsbau.



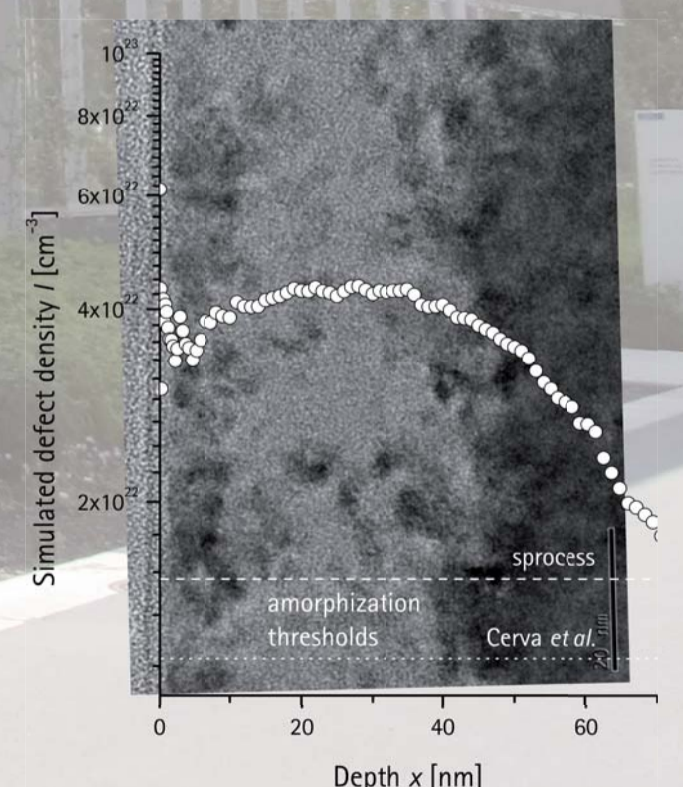
Magnetic bead consisting of magnetite nanoparticles in a SiO₂ matrix with 5 nm Pt nanoparticles on the surface.
(C. Ruffert, N. Bigall, A. Feldhoff, L. Rissing/IMPT and PCI)



Transmission electron micrograph of a GaAs/GaAlAs superlattice grown by molecular beam epitaxy. The inset fast Fourier transform shows the periodicity of the layers.
(E. Rugeramigabo, E. Bugiel/FKP and MBE)



Stacking faults in misfit-layered calcium cobaltate are seen in real space by high resolution transmission electron micrograph (HRTEM) due to non-periodicity as well as in reciprocal space by selected area electron diffraction (SAED, inset) due to streaky reflection intensities.
(A. Feldhoff, B. Geppert/PCI)



Cross section transmission electron micrograph of Si(111) after ion implantation of 1E15 1/cm² BF₂. The overlay shows the corresponding calculated defect density.
(J. Krügener, E. Bugiel/MBE)