

NanoDay 2019

Thursday 10.10.2019

Talks: Appelstr. 4, 30167 Hanover, Multimedia Lecture Hall,
Technical Computer Science (Building 3703)
Poster Session: Schneiderberg 39, 30167 Hannover, Foyer,
Laboratory of Nano and Quantum Engineering (Building 3430)

Program

09:00 Greetings

09:15 - 10:45 Session I (in the multimedia lecture hall)

Towards Innovative Optoelectronics: Probing Stable Excitons and Mobile Charges in Tailor-Made 2D Semiconductors

Jannika Lauth

Institute of Physical Chemistry and Electrochemistry, Group Lauth

How to detect an antiproton with lasers

Teresa Meiners

Institute of Quantum Optics, Group C. Ospelkaus

Electric tracks in epitaxial graphene nanoribbons

Johannes Aprojanz

Institute for Solid State Physics, Group Pfnür & Tegenkamp

10:45 Conference photo

10:50 - 11:20 Coffee break

11:20 - 12:20 Session II

Carbon materials with nanopores for application in rechargeable metal-air batteries

Arne Schierz

Institute of Inorganic Chemistry, Group Behrens

Emerging bio- and nanotechnologies towards 3D brain models

A. Koroleva¹, A. El-Tamer¹, B. Chichkov²

1 Laser Zentrum Hannover e.V.

2 Institute of Quantum Optics, Group Chichkov

12:30 - 13:30 Lunch break

13:30 - 15:00 Poster Session (in the LNQE research building)

15:00 - 16:30 Session III

Electron shuttling in multiple quantum dots

Johannes Bayer

Institute for Solid State Physics, Group Haug

Use of Carbon Nanohorns (CNH) as high potential fillers in elastomers

Marvin Omelan

German Institute of Rubber Technology (DIK), Group Giese

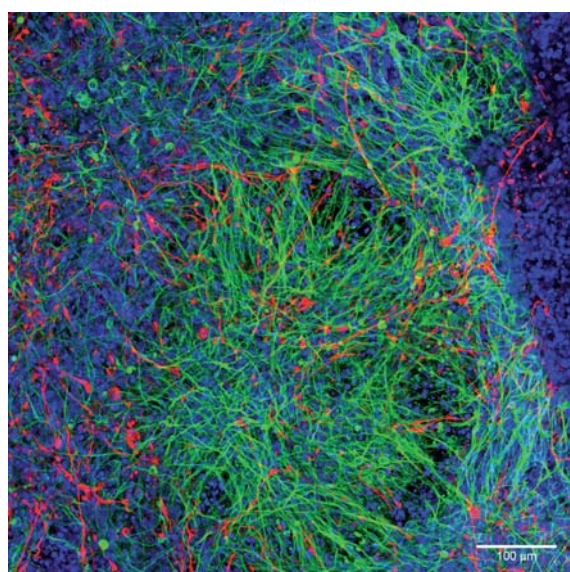
Semiconductor entangled photon sources for quantum information applications

Michael Zopf

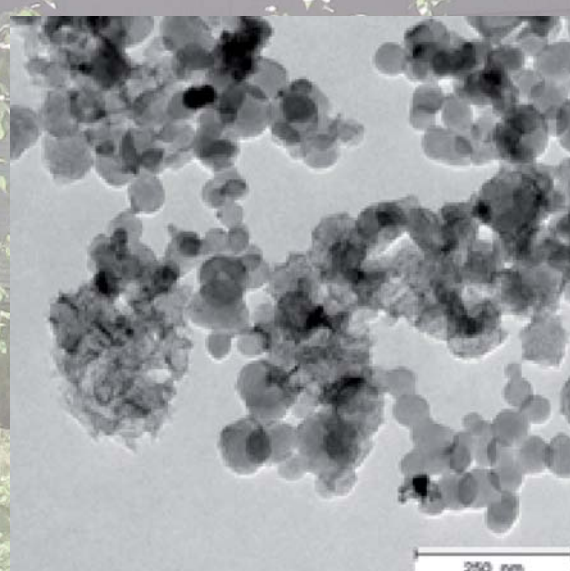
Institute for Solid State Physics, Group Ding

16:30 - 16:45 Award ceremony of the poster prize

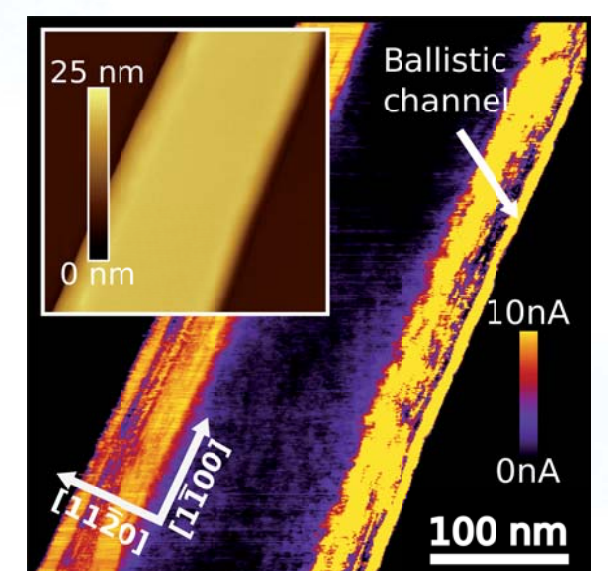
Follow-up: Get-together in the LNQE-research building to conclude the NanoDay.



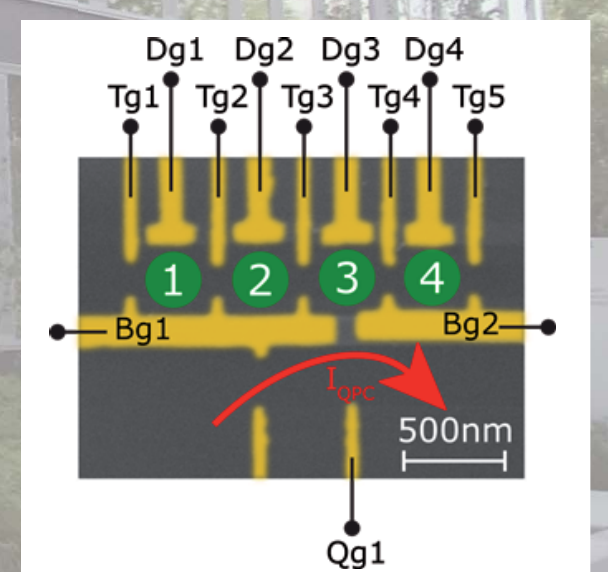
Complex and functional neuronal network developed on a laser produced 3D polymer scaffold from induced pluripotent stem cells. Green - neuronal beta-III-Tubulin staining of neurons. Red - GFAP staining of astrocytes. Blue- cell nuclei (A. Koroleva, A. Deiwick / LZH)



TEM-picture of ethanolic dispersed Carbon Nanohorns (CNH type C) showing structural formation of dahlia- and buds-like aggregates. (M. Omelan / DIK)



Current image of two zz-GNRs on SiC collected by conductive-AFM showing that a highly conductive channel is located at the lower edge of the ribbons (J. Aprojanz / FKP)



Shuttling of single electrons in multiple quantum dots. (J. C. Bayer, T. Wagner, E. P. Rugeramigabo, R. J. Haug / FKP)