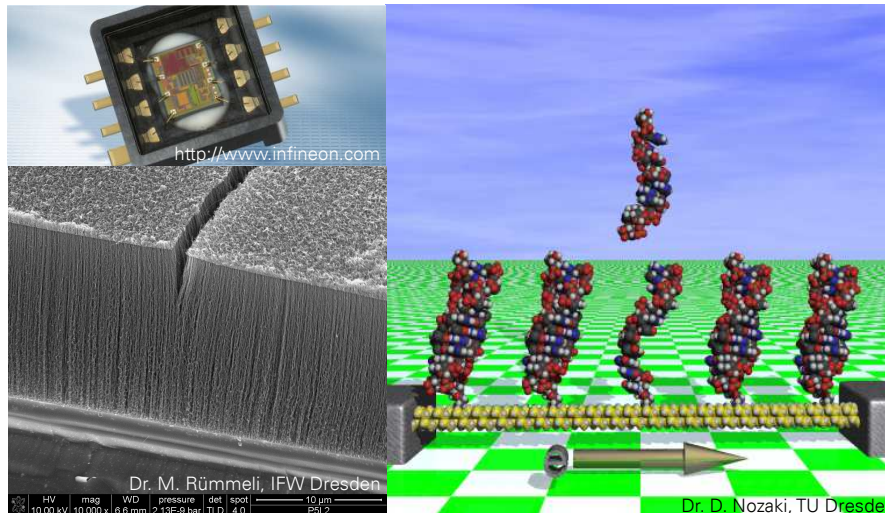


Seminar: current topics in materials science (110)

Sensorics – from microelectronic applications to novel sensing concepts in bioelectronics

Seminar Room (HAL 115), Hallwachsstraße 3, Friday 2.DS (9:20-10:50)

(weekly amount of time: 1 hr. seminar, 1 hr. discussion)



Tentative list of subjects

1. Basics of scientific presentation (Dr. J. Kunstmann, TU Dresden)
2. Microelectronic sensor applications (Dr. N. Thyssen, Infineon Technologies Dresden GmbH)
3. Complex sensor and actor systems (Prof. Dr. G. Gerlach, Institut für Festkörperelektronik, TU Dresden)
4. Sensors for space application (Prof. Dr. S. Fasoulas, Institute for Aerospace Engineering, TU Dresden)
5. Novel sensors based on nanotechnology: overview
6. Carbon functional devices: potential for sensorics
7. Nanowires: synthesis & characterization
8. Nanowire-based sensors: functionalization and application as biosensors
9. Nanoparticles: synthesis & characterization
10. Nanoparticles: functionalization and application as sensors
11. Nanopores: principle
12. Nanopores: sensoric applications
13. Cell sensorics
14. DNA-based sensors

Rules of the game:

- For each topic basic literature will be provided.
- Participation in the seminar is obligatory.
- Presentations will be graded according to: understanding, quality of the presentation, ability to discuss the results, ability to ask questions.
- Presentations: 45 min., followed by 45 min. general discussion.

First meeting: Fri 16.10.2009, 09:20, Seminar Room (HAL 115), Hallwachsstraße 3

Contact and registration: seminar@nano.tu-dresden.de