

Japan-Germany Colloquium 2005

Semiconductor Physics and Technology

February 14-16 2005

MPI für Physik komplexer Systeme, Nöthnitzer Str. 38, Dresden

jointly organized by

Japan Society for the Promotion of Science, JSPS Bonn Office
 TU Dresden, Institute for Semiconductor Physics
 Max Planck Institute for the Physics of Complex Systems

Program

02/10

February 13, 2005, Sunday

19:00	Registration	MPI für Physik komplexer Systeme Nöthnitzer Str. 38, Dresden
20:00	Reception	

February 14, 2005, Monday

9:00	Kenichi IGA, Jörg WEBER	Opening remarks
9:10	Yasuhiko ARAKAWA Edward LAVROV	Introduction to Colloquium
9:20	Kenichi IGA	JSPS Activities and Overview of Semiconductor Technology in Photonics
10:00	Joachim WAGNER	Group III antimonides: from materials research to high-performance infrared semiconductor lasers
10:40	<i>Coffee break</i>	
11:00	Takao SOMEYA	Recent progress and future prospect of organic transistor integrated circuits for large-area sensors
11:40	Martin PFEIFFER	Controlled p- and n-doping of amorphous and polycrystalline organic semiconductors: basics and application in organic LEDs and solar cells
12:20	<i>Lunch</i>	
13:30	Yasuhiko ARAKAWA	Quantum dot and photonic crystal for nanophotonic devices
14:10	Ralf WEHRSPORN	Silicon based photonic crystals: from fundamentals to applications
14:50	Kiyoshi ASAKAWA	Fusion of Quantum Dots and Photonic Crystals- Application to Ultra-Fast All-Optical Switch-
15:30	<i>Coffee break</i>	
16:00	Andrej DENISENKO	Diamond power devices: concepts and limits
16:40	Hiroo MUNEKATA	Optical access to spin degree of freedom in III-V-based magnetic semiconductors
17:20	Michael OESTREICH	Semiconductor spintronics: from basic physics towards spin devices
18:00	Martin BRANDT	Hydrogen in ferromagnetic semiconductors
19:30	<i>Bus transfer to restaurant,</i>	
20:00	<i>Conference dinner at ‚Sophienkeller‘, Taschenberg 3, Dresden</i>	
22:30	<i>Bus transfer to MPI Guesthouse</i>	

February 15, 2005, Tuesday

9:00	Masahiro ASADA	Interaction of Nanostructures with Terahertz Wave and Its Application to Oscillators and Amplifiers
9:40	Ulrich SCHWARZ	Blue laser diodes
10:20	Kazuhiko HIRAKAWA	Dispersive terahertz gain of non-classical oscillator: Bloch oscillation in semiconductor super lattices
11:00	<i>Coffee break</i>	
11:30	Alfred FORCHEL	Light matter interaction effects in quantum dots microcavities
12:10	Yoshiro HIRAYAMA	Coherent Control in Semiconductor Nanostructures
12:50	<i>Lunch</i>	
14:00	Fumio KOYAMA	Physics and Technology for VCSEL-related Devices
14:40	Manfred HELM	New concepts for short wavelength quantum cascade lasers and few cycle THz emitters
15:20	Stefan GLUNZ	Defect-related issues in solar cells
16:00	<i>Coffee break</i>	
16:30	Yasushi NANISHI	Growth, structure and properties of InN, InGaN and InN/InGaN quantum wells
17:10	Detlev HOFMANN	Doping issues in ZnO
17:50	Hartmut BRACHT	Diffusion spectroscopy with isotopically controlled semiconductors
19:30	<i>Dinner at restaurant 'Feldschlösschen – Stammhaus', Budapester Str. 32, Dresden</i>	

February 16, 2005, Wednesday

9:00	Visit of a research facility. 4 choices, to be decided on Monday by participants.
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