# Poster Session A1

# Formation and Characterization of Quantum Dots and Rings [I]

Monday, July 11th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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|---|---|---|---|
| Paola Atkinson | | *Site-control of InAs quantum dot nucleation by ex-situ electron-beam lithographic patterning of GaAs substrates.* | [PA1-157] |
| Devis Bellucci | Universita di Modena | *Magnetic-field controlled localization of electron-hole complexes in tunnel-coupled quantum dots1* | [PA1-107] |
| Andrea Bertoni | Universita di Modena | *Control of charge relaxation time in coupled quantum dots through external fields* | [PA1-054] |
| Erik Bogaart | Eindhoven University of Technology | *Carrier capture and relaxation through a continuum background in InAs quantum dots* | [PA1-044] |
| Luis Dias da Silva | Ohio University | *Polarization effects in the optical Aharonov-Bohm oscillations in semiconductor quantum rings and type-II quantum dots.* | [PA1-025] |
| Martin Geller | Technische Universität Berlin | *Direct observation of tunneling emission to determine localization energies in self-organized quantum dots* | [PA1-047] |
| Michael Hanke | Martin-Luther-University Halle-Wittenberg | *Morphology and self-assembling of SiGe/Si(001) nanoscale islands grown by liquid phase epitaxy in the near- and far non-equilibrium growth limits* | [PA1-015] |
| Lixin He | | *Electronic properties of type-III nanostructures: prediction of an excitonic ground state in self-assembled InAs/InSb quantum dots* | [PA1-084] |
| Alexander Hoegele | Ludwig-Maximilians-Universität | *Interferometry of a Single Quantum Dot* | [PA1-132] |
| Jordi Ibanez | CSIC | *Probing the composition of InAs/(AlGa)As and (InAl)As/(AlGa)As self-assembled quantum dots by Raman spectroscopy* | [PA1-078] |
| Chao Jiang | University of Tokyo | *Remarked Geometrical Anisotropy in Self-assembled GaSb/GaAs Quantum Dots* | [PA1-100] |
| Erich Kaufmann | | *Epitaxial quantum dots from immiscible material combinations: The case of PbTe/CdTe* | [PA1-058] |
| Hubert Krenner | Technische Universitaet Muenchen | *Tunable coupling of excitons in single Quantum Dot Molecules* | [PA1-081] |
| Tilmar Kuemmell | | *Structural and Optical Analysis of Size-Controlled InAs Quantum Dashes* | [PA1-155] |
| Rainer Lechner | Johannes Kepler Universitaet | *Dot formation and 2D intermixing driven by cation surface exchange in IV-VI heterostructures* | [PA1-027] |
| Sanghoon Lee | | *Temperature-dependent photoluminescence of vertically stacked self-assembled CdSe quantum dots in ZnSe* | [PA1-010] |
| Jungil Lee | Korea Institute of Science and Technology | *Energy states in InAs-GaAs quantum dots-in-asymmetric-well infrared photodetector structure* | [PA1-079] |
| Phuong Nguyen | | *Electronic continuum states of InAs/GaAs quantum dots* | [PA1-007] |
| Eugene Olshanetsky | Russian Academy of Sciences - Siberian Branch | *Electron transport through antidot superlatices in Si/Si0.7Ge0.3 heterostructures: new lattice-induced magnetoresistance oscillations at low magnetic fields.* | [PA1-039] |
| Evgeny Onishchenko | Russian Academy of Sciences | *Photoluminescence of CdSe/ZnSe quantum dots grown on GaAs(001) and Si(001)/Ge substrates* | [PA1-153] |
| Ryuji Oshima | University of Tsukuba | *Long wavelength InAs self-assembled quantum dots embedded in GaNAs strain compensating layers* | [PA1-028] |
| Takeshi Ota | NTT Basic Research Laboratories | *Molecular ground states and their transitions in a single InAs quantum dot molecule* | [PA1-089] |
| Kazunari Ozasa | RIKEN | *Dependence of photoluminescence of CdSe/ZnS nanocrystals on excitation wavelength* | [PA1-068] |
| Udo Pohl | Technische Universität Berlin | *Formation of multimodal InAs/GaAs quantum dots* | [PA1-042] |
| Dirk Reuter | Ruhr-Universität Bochum | *Influence of a lateral electric field on the optical properties of InAs quantum dots* | [PA1-020] |
| Veronika Rinnerbauer | | *Spectroscopic ellipsometry showing quantum confinement effects in layer by layer deposited colloidal HgTe nanocrystal films* | [PA1-152] |
| Martin Schmidbauer | | *Asymmetric Correlation Function Describing the Positional Ordering of Liquid-phase Epitaxy Si-Ge Nanoscale Islands* | [PA1-004] |
| Stefan Seidl | | *Tuning the fine structure of a self-assembled quantum dot by uniaxial strain* | [PA1-070] |
| Oleg Shegai | | *Resonance photoconductivity of Si/Ge structures with self-organized QD's* | [PA1-159] |

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| Weidong Sheng | National Research Council of Canada | *Electronic and optical properties of InAs/InP self-assembled quantum dots on patterned substrates* | [PA1-040] |
| Johanna Simon | | *Controlled growth of laterally ordered InAs quantum dots on epitaxially patterned (110) cleavage planes* | [PA1-143] |
| Nelson Studart | Universidade Federal de Sao Carlos | *Effect of the alloy composition on the properties of InAs quantum dots grown on a InxGa1-xAs/InP heterostructure for mid-infrared detection* | [PA1-055] |
| Kousuke Torii | | *Landau levels in a novel two dimensional electron system interacting with charged quantum dots* | [PA1-154] |
| Hans-Peter Wagner | | *Relaxation dynamics in a bimodal CdSe/ZnSSe quantum dot distribution* | [PA1-051] |
| Robert Young | Toshiba Research Europe Ltd | *Inversion of exciton level splitting in quantum dots* | [PA1-108] |

## Poster Session A2

## Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures

Monday, July 11th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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| Katherine Aidala | | *Measured and Simulated Images of Cyclotron Orbits in a Two-Dimensional Electron Gas obtained with a Scanning Probe Microscope* | [PA2-139] |
| Richard Akis | Arizona State University | *Simulations of Germanium Epitaxial Growth on the Silicon (100) Surface Incorporating Intermixing* | [PA2-072] |
| Alexey Bykov | | *Spatial modulation of 2D electron gas in heavily modulation-doped GaAs single quantum well with AlAs/GaAs superlattice barriers* | [PA2-029] |
| Russell Deacon | University of Oxford | *Stark Magnetophonon Resonance in Strongly Coupled InAs/GaSb Superlattices* | [PA2-187] |
| Jozef Devreese | Universiteit Antwerpen | *Resonant magnetopolaron effect in a polaron gas confined to a quantum well in a tilted magnetic field* | [PA2-102] |
| Ken-ichi Fujii | Osaka University | *Novel oscillatory behavior of confined electrons at a twin boundary in ZnSe and at an interface in a GaAs/AlGaAs heterostructure* | [PA2-182] |
| Andreas Gärtner | University of Munich | *Dynamics of long-living excitons in tunable potential landscapes* | [PA2-031] |
| Christian Gerl | Universität Regensburg | *Carbon-doped high mobility hole gases on (001) and (110) GaAs* | [PA2-236] |
| Boris Glavin | National Academy of Science of Ukraine | *Resonant enhancement of phonon-electron and photon-phonon coupling in piezoelectric superlattices* | [PA2-134] |
| Shinichiro Gozu | | *Transition from type-II to type-I band configuration for InGaAsSb/AlAsSb quntum wells grown on GaAs substrates* | [PA2-156] |
| Teppo Hakkarainen | Helsinki University of Technology | *Photoluminescence and structural properties of GaInNAs / GaAs quantum wells grown by molecular beam epitaxy under different arsenic pressures* | [PA2-261] |
| Heather Haugan | Air Force Research Laboratory | *Pushing the Envelope to the Maximum: Short-Period InAs/GaSb type-II Superlattices for Mid-Infrared Detectors* | [PA2-049] |
| Sorcha Healy | | *Influence of N cluster states on band dispersion in GaInNAs Quantum Wells* | [PA2-203] |
| Jenn-Shyong Hwang | National Cheng Kung University | *Studies of electro-optical properties and band alignment of InGaPN/GaAs heterostructures by photoreflectance and photoluminescence* | [PA2-104] |
| Sato Koichi | | *Magneto-oscillation of mid-gap photoluminescence in AlAs:Yb/GaAs superlattices* | [PA2-142] |
| Kazuto Koike | Osaka Institute of Technology | *Characterization of [ZnO]m[ZnMgO]n Multiple Quantum Wells Grown by Molecular Beam Epitaxy* | [PA2-009] |
| Nobuo Kotera | Kyushu Institute of Technology | *Determination of Electron Effective Mass from Optical Transition Energy in InGaAs/InAlAs Quantum Well* | [PA2-065] |
| Snezana Lazic | Universidad Autónoma de Madrid | *Resonant Raman Scattering in AlGaAs/InGaAsN Multiquantum Wells: Measuring the N concentration* | [PA2-279] |
| Andrea Markelz | State University of New York at Buffalo | *Frequency Dependent Momentum Relaxation Rates In 2DEG Systems* | [PA2-255] |
| Yury Mityagin | Russian Academy of Sciences | *Sequential Resonant Tunneling in Superlattices in Transverse Magnetic Field - A Probe of the Nonequilibrium Electronic Distrubution Function.* | [PA2-097] |
| Hideki Momose | Osaka University | *Impurity cyclotron resonance in InGaAs/GaAs and InGaAs/AlAs superlattices grown on GaAs substrates* | [PA2-170] |

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| Maksym Myronov | | *Diffusion induced hole Hall mobility enhancement in modulation doped SiGe heterostructures grown by SS-MBE* | [PA2-030] |
| Heng-Yau Pan | Far East College | *General expressions for quantum transport in arbitrary potential profile: L-electron effect on AlAs-GaAs-AlAs double barrier structure* | [PA2-056] |
| Heng-Yau Pan | Far East College | *Analytical bond orbital model: heterobond effect on optical properties of InAs/GaSb superlattices* | [PA2-057] |
| Kentarou Sawano | | *Mobility enhancement in strained-Ge modulation-doped structures by planarization of SiGe buffer layers* | [PA2-062] |
| Michael Schardt | | *TE- and TM-polarization resolved spectroscopy on quantum wells under normal incidence* | [PA2-183] |
| Shumway Shumway | Arizona State University | *Quantum Monte Carlo Studies of Exciton-Exciton Scattering in Quantum Wells* | [PA2-266] |
| Mathias Simma | Johannes Kepler Universitaet Linz | *Deformation potentials and photo-response of PbSe nanostructure* | [PA2-181] |
| Jin Dong Song | Korea Institute of Science and Technology | *Optical and structural properties of InGaAs/InP double quantum wells grown by MBE with polycrystalline GaAs and GaP decomposition sources* | [PA2-180] |
| Hans-Peter Wagner | | *Exciton induced phase coherent photorefractivity in ZnSe quantum wells* | [PA2-050] |

## Poster Session A3

## Two-Dimensional Heterstructure Devices

Monday, July 11th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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| Martyna Grydlik | Universitaet Linz | *Resonator fabrication for switchable two-color MIR detection based on SiGe quantum cascade infrared photodetector* | [PA3-184] |
| Robert Kelsall | University of Leeds | *Terahertz Electroluminescence from Si/SiGe Phonon-Depopulation Quantum Cascade Structures* | [PA3-252] |
| AKM Newaz | State University of New York at Stony Brook | *Shot-Noise Characteristics of Double-Well Resonant-Tunneling Diodes* | [PA3-091] |
| Klaus Reimann | Max-Born-Institut | *Phonon sidebands of intersubband absorption in AlGaN/GaN high-electron-mobility transistors* | [PA3-258] |
| Lutz Schrottke | Paul-Drude-Institut | *Correlation between subband population and threshold current densities in GaAs/(Al,Ga)As quantum-cascade structures/lasers with different barrier heights* | [PA3-077] |

## Poster Session B1

## Formation and Characterization of Quantum Dots and Rings [II]

Tuesday, July 12th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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| Franco Carillo | Scuola Normale Superiore and INFM | *$In_{0.75}Ga_{0.25}As$ on GaAs submicron rings and their application for coherent nanoelectronic devices.* | [PB1-213] |
| Holger Eisele | | *Change of InAs quantum dot structures during capping with GaAs* | [PB1-230] |
| Holger Eisele | | *Structure of InAs/GaAs quantum dots grown with Sb impurities* | [PB1-232] |
| Gernot Fasching | Vienna University of Technology | *Single InAs/GaAs quantum dots: Photocurrent and cross-sectional AFM analysis* | [PB1-211] |
| Sandip Ghosh | Tata Institute of Fundamental Research | *In-plane optical polarization anisotropy of InAs quantum dot ensembles studied using polarized photo-voltage spectroscopy* | [PB1-214] |
| Alex Green | Oxford University | *Two-photon absorption from single InGaN/GaN quantum dots* | [PB1-177] |
| Lixin He | | *Exotic few-particle states in charged self-assembled InAs/GaAs quantum dots* | [PB1-085] |
| Keisuke Kametani | Kyoto University | *Zinc oxide nanostructures grown by metal-organic chemical vapor deposition on various planes of sapphire* | [PB1-267] |
| Gouri Kar | Max-Planck-Institute for Solid State Research | *Ordered SiGe island arrays: Long-range diffusion, free-standing Si bridges and novel device concepts* | [PB1-179] |
| Suwit Kiravittaya | | *Quantum dot defects in quantum dot crystals* | [PB1-196] |
| Dmitriy Krizhanovskiy | | *Individual InGaAs quantum dots with strong in-plane optical anisotropy* | [PB1-185] |
| Takashi Kuroda | National Institute for Materials Science | *Excitonic transitions in semiconductor concentric quantum double-rings* | [PB1-162] |

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| Maximo Lopez-Lopez | CINVESTAV-IPN | *Photoreflectance study of InAs quantum dots on GaAs(n11) substrates* | [PB1-239] |
| Cedrik Meier | | *Optical properties of silicon nanoparticles* | [PB1-287] |
| Tobias Mensing | | *Magnetooptical investigations of single self assembled In0.3Ga0.7As quantum dots with high oscillator strength* | [PB1-215] |
| Thomas Mueller | Technische Universitaet Wien | *Mid-infrared spectroscopy of bound-to-continuum transitions in InAs/GaAs self-assembled quantum dots* | [PB1-164] |
| Toshihiro Nakaoka | | *Quantum confined Stark effect in single self-assembled GaN/AlN quantum dots* | [PB1-268] |
| Wing Ng | University of Sheffield | *Intraband and interband spectroscopic studies of rapid thermal annealed quantum dot structures* | [PB1-188] |
| Armando Rastelli | | *Hierarchical self-assembly of quantum dot structures* | [PB1-241] |
| Marie-Ingrid Richard | CEA-GRENOBLE | *In situ x-ray scattering studies of the 2D-3D transition dur. Ge growth on nominal and patterned Si(001) surfaces* | [PB1-202] |
| Massimo Rontani | Universita di Modena | *Field-Induced Orbital Blockade in Transport through Double Dots* | [PB1-163] |
| Dipankar Sarkar | Universidad Autonoma de Madrid | *Fine structure splitting and biexciton binding energy in single self-assembled InAs/AlAs quantum dots* | [PB1-168] |
| Tomohiko Sato | University of Tokyo | *Magneto-optical spectroscopy of single GaSb/GaAs type II quantum dots* | [PB1-274] |
| Michael Scheibner | | *Long Range Quantum Dot Interaction* | [PB1-229] |
| Matthias Schwab | Universität Dortmund | *Controlling emission dynamics with magnetic and electrc fields* | [PB1-178] |
| Jin Dong Song | Korea Institute of Science and Technology | *Structural and optical properties of InGaAs/GaAs quantum dots in an InGaAs well using repeated depositions of InAs/GaAs short-period superlattices for the application of optical communication* | [PB1-169] |
| Jaakko Sormunen | | *Tunable InGaAsP/InP strain-induced quantum dots* | [PB1-189] |
| R. Stevenson | Research & Development | *Cancellation of fine structure splitting in quantum dots by a magnetic field* | [PB1-220] |
| Alexander Tartakovskii | Department of Physics and Astronomy | *Optically driven electronic and nuclear spin interactions in InGaAs quantum dots* | [PB1-206] |
| Kousuke Torii | | *Redistribution of photogenerated carriers in neutral and charged InAs quantum dot systems* | [PB1-165] |
| Pavel Vagner | | *Hartree-Fock versus quantum Monte Carlo study of persistent current in a one-dimensional ring with single scatterer.* | [PB1-276] |
| Andy Vidan | | *Three Quantum Dots in a Ring* | [PB1-244] |
| Darren Walker | University of Nottingham | *Probing the excited states of ring shaped quantum dots embedded in a quantum well* | [PB1-227] |
| Evgeny Zibik | University of Sheffield | *Singlet and triplet polaron lifetimes in n-type self-assembled InAs/GaAs quantum dots* | [PB1-195] |

## Poster Session B2

## Quantum Wires

Tuesday, July 12th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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| Clive Harris | | *Theory of the energy gap of germanium and silicon nanowires* | [PB2-222] |
| Michael Knop | | *Nonlocal versus local rectification in multiply connected electron waveguide structures* | [PB2-101] |
| Jens Könemann | | *Metal-insulator-transition studied by single-electron tunneling* | [PB2-113] |
| Junichi Motohisa | Hokkaido University | *Fabrication of InP-based axial/radial heterostructure nanowires by selective area MOVPE* | [PB2-148] |
| Junichi Motohisa | Hokkaido University | *Growth and Optical Properties of Hexagonal Nanowire Arrays* | [PB2-150] |
| Satoshi Shimomura | Osaka University | *1.3- μm-range effectively cylindrical $In_{0.53}$ $Ga_{0.47}$ As/$In_{0.52}$ $Al_{0.48}$ As quantum wires grown on (221)A InP substrates by molecular beam epitaxy* | [PB2-254] |
| Marcos Tavares | Faculdade de Tecnologia da Baixada Santista, CEETPS-SP | *Room temperature effects on coupled plasmon-phonon modes in quantum wires* | [PB2-130] |
| Xuelun Wang | National Institute of Advanced Industrial Science and Technology (AIST) | *Observation of Strong Fermi-edge Singularity of Ultrahigh Quality Modulation-doped AlGaAs/GaAs Quantum Wires* | [PB2-061] |

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| Helge Weman | Ecole Federale Polytechnique de Lausanne (EPFL) | *Strongly reduced carrier/exciton transfer efficiency between parallel quantum wires: a comparison with quantum wells* | [PB2-190] |
| Ulrich Wieser | Ruhr-Universität Bochum | *Quantized conductance and bend resistance in an asymmetric Si/SiGe cross junction* | [PB2-110] |
| Hong Qi Xu | Lund University | *Electronic structure and giant polarization anisotropy in optical transition of free-standing semiconductor nanowires* | [PB2-038] |

## Poster Session B3

## Modeling, Processing and Probing Nanostructures

Tuesday, July 12th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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| Stephen Fahy | | *Theory of exciton linewidth broadening and reduced mobility in GaNAs alloys* | [PB3-250] |
| Danylo Grygoryev | Humboldt-Universität Berlin | *Self-organization and morphology of nano-objects investigated by 3D mapping of reciprocal space* | [PB3-117] |
| Jenn-Shyong Hwang | National Cheng Kung University | *Studies of Terahertz Radiation from InAlAs and GaAs Surface Intrinsic-$N^+$ Structures and the Critical Electric Fields of Semiconductors* | [PB3-103] |
| Jenn-Shyong Hwang | National Cheng Kung University | *Effects of epitaxial strain and atomic ordering of InGaPN/GaAs heterostructures* | [PB3-106] |
| Ryuji Katayama | The University of Tokyo | *Buffer design for nitrogen polarity GaN on shapphire(0001) by RF-MBE and application to the nanostructure formation using KOH etching* | [PB3-200] |
| Slavo Kicin | Nanophysics | *Defect location obtainded from scanning a metallic tip close to a quantum point contact* | [PB3-046] |
| Max Migliorato | University of Sheffield | *Modelling of Semiconductor Materials e Nanostrcutures Using Empirical Potentials* | [PB3-263] |
| Amalia Patane | University of Nottingham | *The fragmented band structure of dilute Ga(AsN): fundamental studies and applications* | [PB3-064] |
| Mika Prunnila | VTT Technical Research Centre of Finland | *Self-aligned control of doping profiles in semiconductor nanostructures* | [PB3-146] |
| Joerg Teubert | | *Influence of hydrogenation on the magnetoresistance properties in doped (Ga,In)(N,As)* | [PB3-125] |
| Joerg Teubert | | *Excitation transfer between extended band states and N-related localized states in $GaN_xP_{1-x}$* | [PB3-126] |

## Poster Session B4

## Magnetism and Spin in Nanostructures [I]

Tuesday, July 12th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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| David Austing | National Research Council of Canada | *Few-electron spin configurations and two-electron singlet-triplet separation in circular and rectangular vertical quantum dot mesas in a magnetic field:* | [PB4-059] |
| Dan Csontos | | *Spin injection and accumulation in inhomogeneous semiconductors* | [PB4-092] |
| Jens Herfort | Paul-Drude Institute for Solid State Electronics | *Epitaxial Heusler alloys on GaAs(001) substrates* | [PB4-013] |
| Susumu Ihara | | *Spin-polarized electron transport across a GaAs/GaAs wafer-bonded interface probed by polarized photoluminescence spectroscopy* | [PB4-074] |
| Sanghoon Lee | | *Enhancement of spin polarization in asymmetrically coupled CdSe and CdZnMnSe quantum dots in ZnSe matrix* | [PB4-011] |
| Seung Joo Lee | Dongguk University | *Material dependence of spin currents modulated by electromagnetic barriers in semiconductor nano-wires* | [PB4-006] |
| Chaoxing Liu | Tsinghua University | *Rashba Interaction as a Yang-Mills Field Applied to One-Dimensional System* | [PB4-052] |
| Oleg Maksimov | | *Spin relaxation in ZnCdSe epilayers, ZnCdSe/MgZnCdSe quantum wells, and CdSe/BeZnSe quantum dots* | [PB4-063] |
| Ken Morita | Japan Science and Technology (JST) | *Anomalous spin dynamics due to strong anisotropy in narrow InGaAs (110) quantum wells* | [PB4-067] |
| Philip Poole | National Research Council of Canada | *Electron spin-orbit interaction in InGaAs/InP quantum well studied by means of the weak antilocalization and spin-zero effects in tilted magnetic fields* | [PB4-003] |

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| Piotr Sankowski | Polish Academy of Sciences | *Tight-binding model of spin-polarized tunneling in (Ga,Mn)As-based structures* | [PB4-023] |
| Tigran Shahbazyan | | *Two-dimensional magnetoexcitons in the presence of spin-orbit interactions* | [PB4-034] |
| Jerzy Wróbel | Polish Academy of Sciences | *Spin filtering and Stern-Gerlach effect in hybrid ferromagnet-GaAs/GaAlAs device* | [PB4-045] |
| Wen Xu | Australian National University | *Exchange-enhanced spin-splitting in high-density 2DEGs in the presence of the Rashba effect* | [PB4-008] |
| Kyung-Soo Yi | Pusan National University | *Doping Profile vs Spin Carrier Distributions, Subband Structure, and Spontaneous Magnetization of Selectively Mn-doped DMS Quantum Wells* | [PB4-066] |

# Poster Session C1

# Magnetism and Spin in Nanostructures [II]

Thursday, July 14th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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|---|---|---|---|
| Nikolay Akopian | | *Polarization Indistinguishable Correlated Photons from Spin Blockaded Radiative Cascades in Charged Semiconductor Quantum Dots* | [PC1-205] |
| Ashwin Ashok | | *Modeling Ballistic Spin Transport in GaAs/$Al_xGa_{1-x}As$ Heterostructures* | [PC1-225] |
| Markus Beck | Universität Erlangen | *Spatially resolved Faraday rotation measurements of spin transport and strain-induced spin precession* | [PC1-201] |
| Anadi Bhattacherjee | Universite Paris-Sud | *Transition metal-doped quantum dots: Optical detection and manipulation of spin states* | [PC1-124] |
| Pavel Blajnov | | *Spin Polarization by a Lateral Current in a Single AlGaAs/GaAs Heterojunctions* | [PC1-121] |
| Dominique Bougeard | Technische Universität Muenchen | *Ferromagnetic Ge(Mn) Nanostructures* | [PC1-119] |
| Guillaume Cassabois | | *Breakdown of the frozen exciton spin picture in quantum dots* | [PC1-120] |
| Yuan-Huei Chang | National Taiwan University | *Contactless electroreflectance studies of the band filling effect in Ga1-xMnxAs and GaAs:Be* | [PC1-037] |
| Shun-Jen Cheng | National Chiao Tung University | *Paramagnetism of Interacting Few-Electron Quantum Dot with Single Magnetic Impurity* | [PC1-075] |
| Chon-Sarr Chu | National Chiao Tung University | *Effects of impurity on the dc spin current generation in a Rashba-type channel* | [PC1-192] |
| Stefanie Döhrmann | Universität Hannover | *Temperature Dependence of the Electron g Factor in GaAs* | [PC1-131] |
| Stefanie Döhrmann | Universität Hannover | *Room Temperature Threshold Reduction in Vertical-Cavity Surface-Emitting Spin Lasers* | [PC1-133] |
| Abdelhamid El Kaaouchi | | *Positive magnetoresistance behaviour in the variable range hopping regime in CdSe* | [PC1-105] |
| Daniel Gruber | | *g-Factor Tuning of 2D Electrons in Double-Gated Si/SiGe Quantum wells* | [PC1-218] |
| Vitaliy Guzenko | | *Effect of confinement on the weak anti-localization in InGaAs/InP quasi-1D structures.* | [PC1-129] |
| Dejan Gvozdic | | *Beyond the Rashba model* | [PC1-240] |
| Pham Hai | | *Spin polarized tunneling in III-V based heterostructures with a ferromagnetic MnAs thin film and GaAs:MnAs nanoclusters* | [PC1-093] |
| Jens Herfort | Paul-Drude Institute for Solid State Electronics | *Temperature dependence of the magnetization of Fe nanodisks on GaAs(001) substrates* | [PC1-012] |
| Hee Chang Jeon | | *Magnetic isotropic properties of zinc-blende MnAs epilayer grown by MBE* | [PC1-147] |
| Makoto Kohda | | *Effect of different $n^+$-GaAs thickness/doping density on spin injection of GaMnAs/$n^+$-GaAs Esaki tunnel junctions* | [PC1-158] |
| Piotr Kossacki | Warsaw University | *Relaxation dynamics of ferromagnetic domains in (Cd,Mn)Te quantum wells* | [PC1-210] |
| Olivier Krebs | | *Influence of a small magnetic field on the electron spin relaxation in a single InAs/GaAs quantum dot* | [PC1-221] |
| Dmitriy Krizhanovskiy | | *Polarisation of optical parametric oscillator (OPO) emission in a semiconductor microcavity* | [PC1-144] |
| Rainer Lechner | Johannes Kepler Universitaet | *Strain induced changes in the magnetic phase diagram of metamagnetic heteroepitaxial EuSe/PbSeTe multilayers* | [PC1-026] |
| Wolfgang Loeffler | | *Electrical Spin Injection from ZnMnSe into InGaAs-based Quantum Structures* | [PC1-145] |

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| Lev Magarill | Russian Academy of Sciences - Siberian Branch | *Suppression of spin-orbit effects in 1D system* | [PC1-248] |
| Shunichiro Matsuzaka | | *A systematic study on the anisotropic electron g-factor and hysteric dynamic nuclear polarization in n-GaAs/AlGaAs (110) quantum wells* | [PC1-094] |
| Seiji Nagahara | University of Tokyo | *Long spin relaxation time in InGaN multi-quantum wells: Suppression of the spin-flip process caused by the phase-separated dot formation* | [PC1-262] |
| Ruth Oulton | | *Demonstration of All-Optical, Non-resonant Pumping of Nuclear Spins of Self-Assembled Quantum Dots in Zero Applied Magnetic Field* | [PC1-171] |
| Ruth Oulton | | *Optically Induced Spin Coherence in Self-Assembled InGaAs/GaAs Quantum Dots* | [PC1-199] |
| Maximilian Rogge | | *Spin in the transport spectra of a quantum dot with a complex geometry in a magnetic field* | [PC1-173] |
| Nitin Samarth | Pennsylvania State University | *Magneto-resistance measurements of domain wall trapping in submicron planar (Ga,Mn)As devices* | [PC1-209] |
| Andrey Silov | | *Spin Polarization by a Lateral Current in a Single AlGaAs/GaAs Heterojunctions* | [PC1-121] |
| Alexander Tartakovskii | Department of Physics and Astronomy | *Optical orientation and control of spin-memory in individual InGaAs quantum dots* | [PC1-204] |
| Tetsuya Uemura | | *Analysis of anisotropic tunnel magneto-resistance of GaMnAs/AlAs/GaMnAs magnetic tunnel junction* | [PC1-033] |
| Syoji Yamada | National Institute of Advanced Industrial Science and Technology (AIST) | *Side-Gate Control of Rashba Spin-Orbit Coupling in Channels at Narrow-Gap Hetero-Junctions* | [PC1-253] |
| Masayuki Yamamoto | Sophia University | *Spin polarization induced by Rashba spin-orbit coupling in three terminal devices* | [PC1-243] |
| Kanji Yoh | | *Electrical characterization of an Fe/InGaAs spin FET structure at room temperature* | [PC1-264] |

## Poster Session C2

## Novel Organic and Semiconductor Devices

Thursday, July 14th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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|---|---|---|---|
| S. Chen | | *Dielectric Screening for Carbon Nanotubes in a Gating Electric Field* | [PC2-024] |
| Gottfried Doehler | Universität Erlangen-Nuernberg | *A monolithically integrated intensity-independent polarization-sensitive switch operating at 1.3 μm based on ordering in InGaAsP* | [PC2-231] |
| Rui He | | *Probing ultra-smooth pentacene single monolayers by optical methods* | [PC2-228] |
| Yen Ho | National Cheng Kung University | *Electronic excitations of double-walled armchair carbon nanotubes* | [PC2-018] |
| Jon Ho | | *Temperature-Dependent Electronic Excitations in a 2D Graphite Layer* | [PC2-019] |
| Sungwoo Hwang | Korea University | *Gate bias controlled NDR in an in-plane-gate quantum dot transistor* | [PC2-099] |
| Heongkyu Ju | Eindhoven University of Technology | *Two-photon-absorption-assisted Tera Hz optical gain-modulation in quantum-dot optical amplifiers* | [PC2-112] |
| Erich Kaufmann | | *Optoelectronic lead-salt devices for integrated mid-infrared gas spectroscopy systems* | [PC2-166] |
| Robert Kelsall | University of Leeds | *Modulated Electronic Structures based on Discotic Liquid Crystals* | [PC2-251] |
| Santhosh Krishnan | | *A Monte Carlo particle based simulation of hole transport in p-Channel Si MOSFETs* | [PC2-219] |
| Chi-Te Liang | | *Growth and characterization of GaN/AlGaN high electron mobility transistors on p-type Si substrates* | [PC2-271] |
| Chilang Lu | | *Low-Energy Electronic Properties of Multilayer Graphite in an electric field* | [PC2-076] |
| German Luna-Acosta | | *Microlasers and beam splitters based on chaotic open waveguides* | [PC2-280] |
| Kelly McGroddy | | *Tailoring the properties of photonic crystals for light extraction in GaN* | [PC2-269] |
| David Mowbray | University of Sheffield | *Optical properties and lasing characteristics of high modulation doped 1.3'_Ým InAs self-assembled quantum dots* | [PC2-123] |
| Takeshi Noda | National Institute for Materials Science (NIMS) | *Current-voltage characteristics in double-barrier resonant tunneling diodes with embedded GaAs quantum rings* | [PC2-161] |

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| Hajime Okamoto | | *A Piezoresistive Cantilever Integrating an InAs-based Semiconductor-Superconductor Junction* | [PC2-032] |
| Nikos Pelekanos | | *Influence of polarization fields on the lasing properties of III-nitride quantum wells* | [PC2-235] |
| Dirk Reuter | Ruhr-Universität Bochum | *Optical beam induced current in planar two-dimensional n-p-n devices* | [PC2-021] |
| Martin Sigrist | ETH Zurich | *Few-electron dot fabricated with layered scanning force microscope lithography* | [PC2-041] |
| Khan Tarik | | *Study of the DC characteristics features of the Schottky Junction Transistor or SOI - MESFETs* | [PC2-256] |
| S. Wu | | *Electronic Properties of Armchair Carbon Nanotube Array* | [PC2-043] |
| Qi-Zhong Yang | Darwing College | *Manufacturability of split-gate transistor devices-initial results* | [PC2-088] |

## Poster Session C3

## Physics and Devices for Quantum Information and Communication

Thursday, July 14th, 2005 - 16:00 to 18:00

Enchantment Ballroom, Second Floor

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|---|---|---|---|
| Gabriel Bester | | *Theory of Quantum Entanglement in InGaAs/GaAs Quantum Dot Molecules* | [PC3-083] |
| Marian Florescu | California Institute of Technoloy | *Single photons on demand from photonic crystal heterostructures* | [PC3-127] |
| Marian Florescu | California Institute of Technoloy | *All-Optical Switching and Micro-Transistor Action in Photonic Crystal Architectures* | [PC3-128] |
| Marian Florescu | | *One-atom laser in photonic crystals* | [PC3-136] |
| Marian Florescu | | *Stimulated Raman Scattering in Photonic Crystals* | [PC3-216] |
| Hidekazu Kumano | Hokkaido University | *Correlations and anti-bunching of a charged exciton state and exciton and biexciton states in a single quantum dot* | [PC3-245] |
| Anton Malko | Ecole Polytechnique Federale de Lausanne | *Single photon emitters based on InGaAs/AlGaAs pyramidal quantum dots.* | [PC3-053] |
| Kevin Osborn | | *An InGaAs/GaAs quantum dot single-photon source* | [PC3-265] |
| Stephan Reitzenstein | Universität Wuerzburg | *Lasing effects of InGaAs quantum dots in high quality AlAs/GaAs micropillar cavities* | [PC3-217] |
| Stefan Stufler | Universität Paderborn | *Manipulations of a qubit in a semiconductor quantum dot* | [PC3-080] |
| Jane Timpson | | *Polarisation control and single photon emission enhancement of a quantum dot in a three dimensional ultra-high finesse microcavity* | [PC3-198] |