

MSS-12 Poster Session Listing

by submitter/presenter's last name

Poster Session A	Monday, July 11 th , 2005; 16:00 – 18:00
Poster Session B	Tuesday, July 12 th , 2005; 16:00 – 18:00
Poster Session C	Thursday, July 14 th , 2005; 16:00 – 18:00

Katherine Aidala	[PA2-139]	<i>Measured and Simulated Images of Cyclotron Orbits in a Two-Dimensional Electron Gas obtained with a Scanning Probe Microscope</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Richard Akis Arizona State University	[PA2-072]	<i>Simulations of Germanium Epitaxial Growth on the Silicon (100) Surface Incorporating Intermixing</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Nikolay Akopian	[PC1-205]	<i>Polarization Indistinguishable Correlated Photons from Spin Blockaded Radiative Cascades in Charged Semiconductor Quantum Dots</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Ashwin Ashok	[PC1-225]	<i>Modeling Ballistic Spin Transport in GaAs/Al_xGa_{1-x}As Heterostructures</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Paola Atkinson	[PA1-157]	<i>Site-control of InAs quantum dot nucleation by ex-situ electron-beam lithographic patterning of GaAs substrates.</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
David Austing National Research Council of Canada	[PB4-059]	<i>Few-electron spin configurations and two-electron singlet-triplet separation in circular and rectangular vertical quantum dot mesas in a magnetic field:</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Markus Beck Universität Erlangen	[PC1-201]	<i>Spatially resolved Faraday rotation measurements of spin transport and strain-induced spin precession</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Devis Bellucci Universita di Modena	[PA1-107]	<i>Magnetic-field controlled localization of electron-hole complexes in tunnel-coupled quantum dots I</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Andrea Bertoni Universita di Modena	[PA1-054]	<i>Control of charge relaxation time in coupled quantum dots through external fields</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Gabriel Bester	[PC3-083]	<i>Theory of Quantum Entanglement in InGaAs/GaAs Quantum Dot Molecules</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Anadi Bhattacharjee Universite Paris-Sud	[PC1-124]	<i>Transition metal-doped quantum dots: Optical detection and manipulation of spin states</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Pavel Blajnov	[PC1-121]	<i>Spin Polarization by a Lateral Current in a Single AlGaAs/GaAs Heterojunctions</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Erik Bogaart Eindhoven University of Technology	[PA1-044]	<i>Carrier capture and relaxation through a continuum background in InAs quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Dominique Bougeard Technische Universität Muenchen	[PC1-119]	<i>Ferromagnetic Ge(Mn) Nanostructures</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Alexey Bykov	[PA2-029]	<i>Spatial modulation of 2D electron gas in heavily modulation-doped GaAs single quantum well with AlAs/GaAs superlattice barriers</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Franco Carillo Scuola Normale Superiore and INFM	[PB1-213]	<i>In_{0.75}Ga_{0.25}As on GaAs submicron rings and their application for coherent nanoelectronic devices.</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]

Guillaume Cassabois	[PC1-120]	<i>Breakdown of the frozen exciton spin picture in quantum dots</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Yuan-Huei Chang National Taiwan University	[PC1-037]	<i>Contactless electrodetectance studies of the band filling effect in Ga_{1-x}MnxAs and GaAs:Be</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
S. Chen	[PC2-024]	<i>Dielectric Screening for Carbon Nanotubes in a Gating Electric Field</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Shun-Jen Cheng National Chiao Tung University	[PC1-075]	<i>Paramagnetism of Interacting Few-Electron Quantum Dot with Single Magnetic Impurity</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Chon-Sarr Chu National Chiao Tung University	[PC1-192]	<i>Effects of impurity on the dc spin current generation in a Rashba-type channel</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Dan Csontos	[PB4-092]	<i>Spin injection and accumulation in inhomogeneous semiconductors</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Russell Deacon University of Oxford	[PA2-187]	<i>Stark Magnetophonon Resonance in Strongly Coupled InAs/GaSb Superlattices</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Jozef Devreese Universiteit Antwerpen	[PA2-102]	<i>Resonant magnetopolaron effect in a polaron gas confined to a quantum well in a tilted magnetic field</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Luis Dias da Silva Ohio University	[PA1-025]	<i>Polarization effects in the optical Aharonov-Bohm oscillations in semiconductor quantum rings and type-II quantum dots.</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Gottfried Doehler Universität Erlangen-Nuernberg	[PC2-231]	<i>A monolithically integrated intensity-independent polarization-sensitive switch operating at 1.3 μm based on ordering in InGaAsP</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Holger Eisele	[PB1-230]	<i>Change of InAs quantum dot structures during capping with GaAs</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Holger Eisele	[PB1-232]	<i>Structure of InAs/GaAs quantum dots grown with Sb impurities</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Abdelhamid El Kaouchi	[PC1-105]	<i>Positive magnetoresistance behaviour in the variable range hopping regime in CdSe</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Stephen Fahy	[PB3-250]	<i>Theory of exciton linewidth broadening and reduced mobility in GaNAs alloys</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Gernot Fasching Vienna University of Technology	[PB1-211]	<i>Single InAs/GaAs quantum dots: Photocurrent and cross-sectional AFM analysis</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Marian Florescu California Institute of Technology	[PC3-127]	<i>Single photons on demand from photonic crystal heterostructures</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Marian Florescu California Institute of Technology	[PC3-128]	<i>All-Optical Switching and Micro-Transistor Action in Photonic Crystal Architectures</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Marian Florescu	[PC3-136]	<i>One-atom laser in photonic crystals</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication

Marian Florescu	[PC3-216]	<i>Stimulated Raman Scattering in Photonic Crystals</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Ken-ichi Fujii Osaka University	[PA2-182]	<i>Novel oscillatory behavior of confined electrons at a twin boundary in ZnSe and at an interface in a GaAs/AlGaAs heterostructure</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Andreas Gärtner University of Munich	[PA2-031]	<i>Dynamics of long-living excitons in tunable potential landscapes</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Martin Geller Technische Universität Berlin	[PA1-047]	<i>Direct observation of tunneling emission to determine localization energies in self-organized quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Christian Gerl Universität Regensburg	[PA2-236]	<i>Carbon-doped high mobility hole gases on (001) and (110) GaAs</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Sandip Ghosh Tata Institute of Fundamental Research	[PB1-214]	<i>In-plane optical polarization anisotropy of InAs quantum dot ensembles studied using polarized photo-voltage spectroscopy</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Boris Glavin National Academy of Science of Ukraine	[PA2-134]	<i>Resonant enhancement of phonon-electron and photon-phonon coupling in piezoelectric superlattices</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Shinichiro Gozu	[PA2-156]	<i>Transition from type-II to type-I band configuration for InGaAsSb/AlAsSb quantum wells grown on GaAs substrates</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Alex Green Oxford University	[PB1-177]	<i>Two-photon absorption from single InGaN/GaN quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Daniel Gruber	[PC1-218]	<i>g-Factor Tuning of 2D Electrons in Double-Gated Si/SiGe Quantum wells</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [III]
Martyna Grydlik Universitaet Linz	[PA3-184]	<i>Resonator fabrication for switchable two-color MIR detection based on SiGe quantum cascade infrared photodetector</i>
		Poster Session A3 - Two-Dimensional Heterostructure Devices
Danylo Grygoryev Humboldt-Universität Berlin	[PB3-117]	<i>Self-organization and morphology of nano-objects investigated by 3D mapping of reciprocal space</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Vitaliy Guzenko	[PC1-129]	<i>Effect of confinement on the weak anti-localization in InGaAs/InP quasi-1D structures.</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Dejan Gvozdic	[PB4-240]	<i>Beyond the Rashba model</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Pham Hai	[PC1-093]	<i>Spin polarized tunneling in III-V based heterostructures with a ferromagnetic MnAs thin film and GaAs:MnAs nanoclusters</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Teppo Hakkarainen Helsinki University of Technology	[PA2-261]	<i>Photoluminescence and structural properties of GaInNAs / GaAs quantum wells grown by molecular beam epitaxy under different arsenic pressures</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Michael Hanke Martin-Luther-University Halle-Wittenberg	[PA1-015]	<i>Morphology and self-assembling of SiGe/Si(001) nanoscale islands grown by liquid phase epitaxy in the near- and far non-equilibrium growth limits</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Clive Harris	[PB2-222]	<i>Theory of the energy gap of germanium and silicon nanowires</i>

		Poster Session B2 - Quantum Wires
Heather Haugan Air Force Research Laboratory	[PA2-049]	<i>Pushing the Envelope to the Maximum: Short-Period InAs/GaSb type-II Superlattices for Mid-Infrared Detectors</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Lixin He	[PA1-084]	<i>Electronic properties of type-III nanostructures: prediction of an excitonic ground state in self-assembled InAs/InSb quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Lixin He	[PB1-085]	<i>Exotic few-particle states in charged self-assembled InAs/GaAs quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Rui He	[PC2-228]	<i>Probing ultra-smooth pentacene single monolayers by optical methods</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Sorcha Healy	[PA2-203]	<i>Influence of N cluster states on band dispersion in GaInNAs Quantum Wells</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Jens Herfort Paul-Drude Institute for Solid State Electronics	[PB4-013]	<i>Epitaxial Heusler alloys on GaAs(001) substrates</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Jens Herfort Paul-Drude Institute for Solid State Electronics	[PC1-012]	<i>Temperature dependence of the magnetization of Fe nanodisks on GaAs(001) substrates</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Yen Ho National Cheng Kung University	[PC2-018]	<i>Electronic excitations of double-walled armchair carbon nanotubes</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Jon Ho	[PC2-019]	<i>Temperature-Dependent Electronic Excitations in a 2D Graphite Layer</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Alexander Hoegele Ludwig-Maximilians-Universität	[PA1-132]	<i>Interferometry of a Single Quantum Dot</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Jenn-Shyong Hwang National Cheng Kung University	[PA2-104]	<i>Studies of electro-optical properties and band alignment of InGaPN/GaAs heterostructures by photoreflectance and photoluminescence</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Jenn-Shyong Hwang National Cheng Kung University	[PB3-103]	<i>Studies of Terahertz Radiation from InAlAs and GaAs Surface Intrinsic-N⁺ Structures and the Critical Electric Fields of Semiconductors</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Jenn-Shyong Hwang National Cheng Kung University	[PB3-106]	<i>Effects of epitaxial strain and atomic ordering of InGaPN/GaAs heterostructures</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Sungwoo Hwang Korea University	[PC2-099]	<i>Gate bias controlled NDR in an in-plane-gate quantum dot transistor</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Jordi Ibanez CSIC	[PA1-078]	<i>Probing the composition of InAs/(AlGa)As and (InAl)As/(AlGa)As self-assembled quantum dots by Raman spectroscopy</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Susumu Ihara	[PB4-074]	<i>Spin-polarized electron transport across a GaAs/GaAs wafer-bonded interface probed by polarized photoluminescence spectroscopy</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Hee Chang Jeon	[PC1-147]	<i>Magnetic isotropic properties of zinc-blende MnAs epilayer grown by MBE</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [III]

Chao Jiang University of Tokyo	[PA1-100]	<i>Remarkd Geometrical Anisotropy in Self-assembled GaSb/GaAs Quantum Dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Heongkyu Ju Eindhoven University of Technology	[PC2-112]	<i>Two-photon-absorption-assisted Tera Hz optical gain-modulation in quantum-dot optical amplifiers</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Keisuke Kametani Kyoto University	[PB1-267]	<i>Zinc oxide nanostructures grown by metal-organic chemical vapor deposition on various planes of sapphire</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Gouri Kar Max-Planck-Institute for Solid State Research	[PB1-179]	<i>Ordered SiGe island arrays: Long-range diffusion, free-standing Si bridges and novel device concepts</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Ryuji Katayama The University of Tokyo	[PB3-200]	<i>Buffer design for nitrogen polarity GaN on shapphire(0001) by RF-MBE and application to the nanostructure formation using KOH etching</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Erich Kaufmann	[PA1-058]	<i>Epitaxial quantum dots from immiscible material combinations: The case of PbTe/CdTe</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Erich Kaufmann	[PC2-166]	<i>Optoelectronic lead-salt devices for integrated mid-infrared gas spectroscopy systems</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Robert Kelsall University of Leeds	[PC2-251]	<i>Modulated Electronic Structures based on Discotic Liquid Crystals</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Robert Kelsall University of Leeds	[PA3-252]	<i>Terahertz Electroluminescence from Si/SiGe Phonon-Depopulation Quantum Cascade Structures</i>
		Poster Session A3 - Two-Dimensional Heterstructure Devices
Slavo Kicin Nanophysics	[PB3-046]	<i>Defect location obtained from scanning a metallic tip close to a quantum point contact</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Suwit Kiravittaya	[PB1-196]	<i>Quantum dot defects in quantum dot crystals</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Michael Knop	[PB2-101]	<i>Nonlocal versus local rectification in multiply connected electron waveguide structures</i>
		Poster Session B2 - Quantum Wires
Makoto Kohda	[PC1-158]	<i>Effect of different $n^{\text{sup}}+</sup>$-GaAs thickness/doping density on spin injection of GaMnAs/$n^{\text{sup}}+</sup>$-GaAs Esaki tunnel junctions</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Sato Koichi	[PA2-142]	<i>Magneto-oscillation of mid-gap photoluminescence in AlAs:Yb/GaAs superlattices</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Kazuto Koike Osaka Institute of Technology	[PA2-009]	<i>Characterization of [ZnO]m[ZnMgO]n Multiple Quantum Wells Grown by Molecular Beam Epitaxy</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Jens Königmann	[PB2-113]	<i>Metal-insulator-transition studied by single-electron tunneling</i>
		Poster Session B2 - Quantum Wires
Piotr Kossacki Warsaw University	[PC1-210]	<i>Relaxation dynamics of ferromagnetic domains in (Cd,Mn)Te quantum wells</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Nobuo Kotera Kyushu Institute of Technology	[PA2-065]	<i>Determination of Electron Effective Mass from Optical Transition Energy in InGaAs/InAlAs Quantum Well</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures

Hubert Krenner Technische Universitaet Muenchen	[PA1-081]	<i>Tunable coupling of excitons in single Quantum Dot Molecules</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Santhosh Krishnan	[PC2-219]	<i>A Monte Carlo particle based simulation of hole transport in p-Channel Si MOSFETs</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Dmitriy Krizhanovskiy	[PB1-185]	<i>Individual InGaAs quantum dots with strong in-plane optical anisotropy</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Dmitriy Krizhanovskiy	[PC1-144]	<i>Polarisation of optical parametric oscillator (OPO) emission in a semiconductor microcavity</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Tilmar Kueммell	[PA1-155]	<i>Structural and Optical Analysis of Size-Controlled InAs Quantum Dashes</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Hidekazu Kumano Hokkaido University	[PC3-245]	<i>Correlations and anti-bunching of a charged exciton state and exciton and biexciton states in a single quantum dot</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Takashi Kuroda National Institute for Materials Science	[PB1-162]	<i>Excitonic transitions in semiconductor concentric quantum double-rings</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [III]
Snezana Lazic Universidad Autónoma de Madrid	[PA2-279]	<i>Resonant Raman Scattering in AlGaAs/InGaAsN Multiquantum Wells: Measuring the N concentration</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Rainer Lechner Johannes Kepler Universitaet	[PA1-027]	<i>Dot formation and 2D intermixing driven by cation surface exchange in IV-VI heterostructures</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Rainer Lechner Johannes Kepler Universitaet	[PC1-026]	<i>Strain induced changes in the magnetic phase diagram of metamagnetic heteroepitaxial EuSe/PbSeTe multilayers</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [III]
Sanghoon Lee	[PA1-010]	<i>Temperature-dependent photoluminescence of vertically stacked self-assembled CdSe quantum dots in ZnSe</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Jungil Lee Korea Institute of Science and Technology	[PA1-079]	<i>Energy states in InAs-GaAs quantum dots-in-asymmetric-well infrared photodetector structure</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Sanghoon Lee	[PB4-011]	<i>Enhancement of spin polarization in asymmetrically coupled CdSe and CdZnMnSe quantum dots in ZnSe matrix</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Seung Joo Lee Dongguk University	[PB4-006]	<i>Material dependence of spin currents modulated by electromagnetic barriers in semiconductor nano-wires</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Chi-Te Liang	[PC2-271]	<i>Growth and characterization of GaN/AlGaN high electron mobility transistors on p-type Si substrates</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Chaoxing Liu Tsinghua University	[PB4-052]	<i>Rashba Interaction as a Yang-Mills Field Applied to One-Dimensional System</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Wolfgang Loeffler	[PC1-145]	<i>Electrical Spin Injection from ZnMnSe into InGaAs-based Quantum Structures</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Maximo Lopez-Lopez CINVESTAV-IPN	[PB1-239]	<i>Photoreflectance study of InAs quantum dots on GaAs(n11) substrates</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]

Chilang Lu	[PC2-076]	<i>Low-Energy Electronic Properties of Multilayer Graphite in an electric field</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
German Luna-Acosta	[PC2-280]	<i>Micro lasers and beam splitters based on chaotic open waveguides</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Lev Magarill Russian Academy of Sciences - Siberian Branch	[PC1-248]	<i>Suppression of spin-orbit effects in 1D system</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Oleg Maksimov	[PB4-063]	<i>Spin relaxation in ZnCdSe epilayers, ZnCdSe/MgZnCdSe quantum wells, and CdSe/BeZnSe quantum dots</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Anton Malko Ecole Polytechnique Federale de Lausanne	[PC3-053]	<i>Single photon emitters based on InGaAs/AlGaAs pyramidal quantum dots.</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Andrea Markelz State University of New York at Buffalo	[PA2-255]	<i>Frequency Dependent Momentum Relaxation Rates In 2DEG Systems</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Shunichiro Matsuzaka	[PC1-094]	<i>A systematic study on the anisotropic electron g-factor and hysteric dynamic nuclear polarization in n-GaAs/AlGaAs (110) quantum wells</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Kelly McGroddy	[PC2-269]	<i>Tailoring the properties of photonic crystals for light extraction in GaN</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Cedrik Meier	[PB1-287]	<i>Optical properties of silicon nanoparticles</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Tobias Mensing	[PB1-215]	<i>Magneto-optical investigations of single self assembled In_{0.3}Ga_{0.7}As quantum dots with high oscillator strength</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Max Migliorato University of Sheffield	[PB3-263]	<i>Modelling of Semiconductor Materials e Nanostructures Using Empirical Potentials</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Yury Mityagin Russian Academy of Sciences	[PA2-097]	<i>Sequential Resonant Tunneling in Superlattices in Transverse Magnetic Field ? A Probe of the Nonequilibrium Electronic Distribution Function.</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Hideki Momose Osaka University	[PA2-170]	<i>Impurity cyclotron resonance in InGaAs/GaAs and InGaAs/AlAs superlattices grown on GaAs substrates</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Ken Morita Japan Science and Technology (JST)	[PB4-067]	<i>Anomalous spin dynamics due to strong anisotropy in narrow InGaAs (110) quantum wells</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Junichi Motohisa Hokkaido University	[PB2-148]	<i>Fabrication of InP-based axial/radial heterostructure nanowires by selective area MOVPE</i>
		Poster Session B2 - Quantum Wires
Junichi Motohisa Hokkaido University	[PB2-150]	<i>Growth and Optical Properties of Hexagonal Nanowire Arrays</i>
		Poster Session B2 - Quantum Wires
David Mowbray University of Sheffield	[PC2-123]	<i>Optical properties and lasing characteristics of high modulation doped 1.3μm InAs self-assembled quantum dots</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Thomas Mueller Technische Universitaet Wien	[PB1-164]	<i>Mid-infrared spectroscopy of bound-to-continuum transitions in InAs/GaAs self-assembled quantum dots</i>

		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Maksym Myronov	[PA2-030]	<i>Diffusion induced hole Hall mobility enhancement in modulation doped SiGe heterostructures grown by SS-MBE</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Seiji Nagahara University of Tokyo	[PC1-262]	<i>Long spin relaxation time in InGaN multi-quantum wells:
Suppression of the spin-flip process caused by the phase-separated dot formation</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Toshihiro Nakaoka	[PB1-268]	<i>Quantum confined Stark effect in single self-assembled GaN/AlN quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
AKM Newaz State University of New York at Stony Brook	[PA3-091]	<i>Shot-Noise Characteristics of Double-Well Resonant-Tunneling Diodes</i>
		Poster Session A3 - Two-Dimensional Heterstructure Devices
Wing Ng University of Sheffield	[PB1-188]	<i>Intraband and interband spectroscopic studies of rapid thermal annealed quantum dot structures</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Phuong Nguyen	[PA1-007]	<i>Electronic continuum states of InAs/GaAs quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Takeshi Noda National Institute for Materials Science (NIMS)	[PC2-161]	<i>Current-voltage characteristics in double-barrier resonant tunneling diodes with embedded GaAs quantum rings</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Hajime Okamoto	[PC2-032]	<i>A Piezoresistive Cantilever Integrating an InAs-based Semiconductor-Superconductor Junction</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Eugene Olshanetsky Russian Academy of Sciences - Siberian Branch	[PA1-039]	<i>Electron transport through antidot superlattices in Si/Si_{0.7}Ge_{0.3} heterostructures: new lattice-induced magnetoresistance oscillations at low magnetic fields.</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Evgeny Onishchenko Russian Academy of Sciences	[PA1-153]	<i>Photoluminescence of CdSe/ZnSe quantum dots grown on GaAs(001) and Si(001)/Ge substrates</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Kevin Osborn	[PC3-265]	<i>An InGaAs/GaAs quantum dot single-photon source</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Ryuji Oshima University of Tsukuba	[PA1-028]	<i>Long wavelength InAs self-assembled quantum dots embedded in GaNAs strain compensating layers</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Ruth Oulton	[PC1-171]	<i>Demonstration of All-Optical, Non-resonant Pumping of Nuclear Spins of Self-Assembled Quantum Dots in Zero Applied Magnetic Field</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Ruth Oulton	[PC1-199]	<i>Optically Induced Spin Coherence in Self-Assembled InGaAs/GaAs Quantum Dots</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [III]
Kazunari Ozasa RIKEN	[PA1-068]	<i>Dependence of photoluminescence of CdSe/ZnS nanocrystals on excitation wavelength</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Heng-Yau Pan Far East College	[PA2-056]	<i>General expressions for quantum transport in arbitrary potential profile: L-electron effect on AlAs-GaAs-AlAs double barrier structure</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Heng-Yau Pan Far East College	[PA2-057]	<i>Analytical bond orbital model: heterobond effect on optical properties of InAs/GaSb superlattices</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures

Amalia Patane University of Nottingham	[PB3-064]	<i>The fragmented band structure of dilute Ga(AsN): fundamental studies and applications</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Nikos Pelekanos	[PC2-235]	<i>Influence of polarization fields on the lasing properties of III-nitride quantum wells</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Udo Pohl Technische Universität Berlin	[PA1-042]	<i>Formation of multimodal InAs/GaAs quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Philip Poole National Research Council of Canada	[PB4-003]	<i>Electron spin-orbit interaction in InGaAs/InP quantum well studied by means of the weak antilocalization and spin-zero effects in tilted magnetic fields</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Mika Prunnila VTT Technical Research Centre of Finland	[PB3-146]	<i>Self-aligned control of doping profiles in semiconductor nanostructures</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Armando Rastelli	[PB1-241]	<i>Hierarchical self-assembly of quantum dot structures</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Klaus Reimann Max-Born-Institut	[PA3-258]	<i>Phonon sidebands of intersubband absorption in AlGaIn/GaN high-electron-mobility transistors</i>
		Poster Session A3 - Two-Dimensional Heterstructure Devices
Stephan Reitzenstein Universität Wuerzburg	[PC3-217]	<i>Lasing effects of InGaAs quantum dots in high quality AlAs/GaAs micropillar cavities</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Dirk Reuter Ruhr-Universität Bochum	[PA1-020]	<i>Influence of a lateral electric field on the optical properties of InAs quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Dirk Reuter Ruhr-Universität Bochum	[PC2-021]	<i>Optical beam induced current in planar two-dimensional n-p-n devices</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Marie-Ingrid Richard CEA-GRENOBLE	[PB1-202]	<i>In situ x-ray scattering studies of the 2D-3D transition dur. Ge growth on nominal and patterned Si(001) surfaces1</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Veronika Rinnerbauer	[PA1-152]	<i>Spectroscopic ellipsometry showing quantum confinement effects in layer by layer deposited colloidal HgTe nanocrystal films</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Maximilian Rogge	[PC1-173]	<i>Spin in the transport spectra of a quantum dot with a complex geometry in a magnetic field</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Massimo Rontani Universita di Modena	[PB1-163]	<i>Field-Induced Orbital Blockade in Transport through Double Dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Nitin Samarth Pennsylvania State University	[PC1-209]	<i>Magneto-resistance measurements of domain wall trapping in submicron planar (Ga,Mn)As devices</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Piotr Sankowski Polish Academy of Sciences	[PB4-023]	<i>Tight-binding model of spin-polarized tunneling in (Ga,Mn)As-based structures</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Dipankar Sarkar Universidad Autonoma de Madrid	[PB1-168]	<i>Fine structure splitting and biexciton binding energy in single self-assembled InAs/AlAs quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Tomohiko Sato University of Tokyo	[PB1-274]	<i>Magneto-optical spectroscopy of single GaSb/GaAs type II quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]

Kentarou Sawano	[PA2-062]	<i>Mobility enhancement in strained-Ge modulation-doped structures by planarization of SiGe buffer layers</i>
Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures		
Michael Schardt	[PA2-183]	<i>TE- and TM-polarization resolved spectroscopy on quantum wells under normal incidence</i>
Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures		
Michael Scheibner	[PB1-229]	<i>Long Range Quantum Dot Interaction</i>
Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]		
Martin Schmidbauer	[PA1-004]	<i>Asymmetric Correlation Function Describing the Positional Ordering of Liquid-phase Epitaxy Si-Ge Nanoscale Islands</i>
Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]		
Lutz Schrottke Paul-Drude-Institut	[PA3-077]	<i>Correlation between subband population and threshold current densities in GaAs/(Al,Ga)As quantum-cascade structures/lasers with different barrier heights</i>
Poster Session A3 - Two-Dimensional Heterstructure Devices		
Matthias Schwab Universität Dortmund	[PB1-178]	<i>Controlling emission dynamics with magnetic and electric fields</i>
Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]		
Stefan Seidl	[PA1-070]	<i>Tuning the fine structure of a self-assembled quantum dot by uniaxial strain</i>
Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]		
Tigran Shahbazyan	[PB4-034]	<i>Two-dimensional magnetoexcitons in the presence of spin-orbit interactions</i>
Poster Session B4 - Magnetism and Spin in Nanostructures [I]		
Oleg Shegai	[PA1-159]	<i>Resonance photoconductivity of Si/Ge structures with self-organized QD's</i>
Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]		
Weidong Sheng National Research Council of Canada	[PA1-040]	<i>Electronic and optical properties of InAs/InP self-assembled quantum dots on patterned substrates</i>
Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]		
Satoshi Shimomura Osaka University	[PB2-254]	<i>1.3- &mu;m-range effectively cylindrical In<sub>0.53</sub>Ga<sub>0.47</sub>As/In<sub>0.52</sub>Al<sub>0.48</sub>As quantum wires grown on (221)A InP substrates by molecular beam epitaxy</i>
Poster Session B2 - Quantum Wires		
Shumway Shumway Arizona State University	[PA2-266]	<i>Quantum Monte Carlo Studies of Exciton-Exciton Scattering in Quantum Wells</i>
Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures		
Martin Sigrist ETH Zurich	[PC2-041]	<i>Few-electron dot fabricated with layered scanning force microscope lithography</i>
Poster Session C2 - Novel Organic and Semiconductor Devices		
Andrey Silov	[PC1-121]	<i>Spin Polarization by a Lateral Current in a Single AlGaAs/GaAs Heterojunctions</i>
Poster Session C1 - Magnetism and Spin in Nanostructures [II]		
Mathias Simma Johannes Kepler Universitaet Linz	[PA2-181]	<i>Deformation potentials and photo-response of PbSe nanostructure</i>
Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures		
Johanna Simon	[PA1-143]	<i>Controlled growth of laterally ordered InAs quantum dots on epitaxially patterned (110) cleavage planes</i>
Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]		
Jin Dong Song Korea Institute of Science and Technology	[PB1-169]	<i>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</i>
Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]		

Jin Dong Song Korea Institute of Science and Technology	[PA2-180]	<i>Optical and structural properties of InGaAs/InP double quantum wells grown by MBE with polycrystalline GaAs and GaP decomposition sources</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Jaakko Sormunen	[PB1-189]	<i>Tunable InGaAsP/InP strain-induced quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
R. Stevenson Research & Development	[PB1-220]	<i>Cancellation of fine structure splitting in quantum dots by a magnetic field</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Nelson Studart Universidade Federal de Sao Carlos	[PA1-055]	<i>Effect of the alloy composition on the properties of InAs quantum dots grown on a In_xGa_{1-x}As/InP heterostructure for mid-infrared detection</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Stefan Stuffer Universität Paderborn	[PC3-080]	<i>Manipulations of a qubit in a semiconductor quantum dot</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Khan Tarik	[PC2-256]	<i>Study of the DC characteristics features of the Schottky Junction Transistor or SOI - MESFETs</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Alexander Tartakovskii Department of Physics and Astronomy	[PB1-206]	<i>Optically driven electronic and nuclear spin interactions in InGaAs quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Alexander Tartakovskii Department of Physics and Astronomy	[PC1-204]	<i>Optical orientation and control of spin-memory in individual InGaAs quantum dots</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Marcos Tavares Faculdade de Tecnologia da Baixada Santista, CEETPS-SP	[PB2-130]	<i>Room temperature effects on coupled plasmon-phonon modes in quantum wires</i>
		Poster Session B2 - Quantum Wires
Joerg Teubert	[PB3-125]	<i>Influence of hydrogenation on the magnetoresistance properties in doped (Ga,In)(N,As)</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Joerg Teubert	[PB3-126]	<i>Excitation transfer between extended band states and N-related localized states in GaN_xP_{1-x}</i>
		Poster Session B3 - Modeling, Processing and Probing Nanostructures
Jane Timpson	[PC3-198]	<i>Polarisation control and single photon emission enhancement of a quantum dot in a three dimensional ultra-high finesse microcavity</i>
		Poster Session C3 - Physics and Devices for Quantum Information and Communication
Kousuke Torii	[PA1-154]	<i>Landau levels in a novel two dimensional electron system interacting with charged quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Kousuke Torii	[PB1-165]	<i>Redistribution of photogenerated carriers in neutral and charged InAs quantum dot systems</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Tetsuya Uemura	[PC1-033]	<i>Analysis of anisotropic tunnel magneto-resistance of GaMnAs/AlAs/GaMnAs magnetic tunnel junction</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Pavel Vagner	[PB1-276]	<i>Hartree-Fock versus quantum Monte Carlo study of persistent current in a one-dimensional ring with single scatterer.</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Andy Vidan	[PB1-244]	<i>Three Quantum Dots in a Ring</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Hans-Peter Wagner	[PA1-051]	<i>Relaxation dynamics in a bimodal CdSe/ZnSSe quantum dot distribution</i>

		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Hans-Peter Wagner	[PA2-050]	<i>Exciton induced phase coherent photorefractivity in ZnSe quantum wells</i>
		Poster Session A2 - Formation and Characterization of Quantum Wells and Two-dimensional Heterostructures
Darren Walker University of Nottingham	[PB1-227]	<i>Probing the excited states of ring shaped quantum dots embedded in a quantum well</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]
Xuelun Wang National Institute of Advanced Industrial Science and Technology (AIST)	[PB2-061]	<i>Observation of Strong Fermi-edge Singularity of Ultrahigh Quality Modulation-doped AlGaAs/GaAs Quantum Wires</i>
		Poster Session B2 - Quantum Wires
Helge Weman Ecole Federale Polytechnique de Lausanne (EPFL)	[PB2-190]	<i>Strongly reduced carrier/exciton transfer efficiency between parallel quantum wires: a comparison with quantum wells</i>
		Poster Session B2 - Quantum Wires
Ulrich Wieser Ruhr-Universität Bochum	[PB2-110]	<i>Quantized conductance and bend resistance in an asymmetric Si/SiGe cross junction</i>
		Poster Session B2 - Quantum Wires
Jerzy Wróbel Polish Academy of Sciences	[PB4-045]	<i>Spin filtering and Stern-Gerlach effect in hybrid ferromagnet-GaAs/GaAlAs device</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
S. Wu	[PC2-043]	<i>Electronic Properties of Armchair Carbon Nanotube Array</i>
		Poster Session C2 - Novel Organic and Semiconductor Devices
Wen Xu Australian National University	[PB4-008]	<i>Exchange-enhanced spin-splitting in high-density 2DEGs in the presence of the Rashba effect</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Hong Qi Xu Lund University	[PB2-038]	<i>Electronic structure and giant polarization anisotropy in optical transition of free-standing semiconductor nanowires</i>
		Poster Session B2 - Quantum Wires
Syoji Yamada National Institute of Advanced Industrial Science and Technology (AIST)	[PC1-253]	<i>Side-Gate Control of Rashba Spin-Orbit Coupling in Channels at Narrow-Gap Hetero-Junctions</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Masayuki Yamamoto Sophia University	[PC1-243]	<i>Spin polarization induced by Rashba spin-orbit coupling in three terminal devices</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Kyung-Soo Yi Pusan National University	[PB4-066]	<i>Doping Profile vs Spin Carrier Distributions, Subband Structure, and Spontaneous Magnetization of Selectively Mn-doped DMS Quantum Wells</i>
		Poster Session B4 - Magnetism and Spin in Nanostructures [I]
Kanji Yoh	[PC1-264]	<i>Electrical characterization of an Fe/InGaAs spin FET structure at room temperature</i>
		Poster Session C1 - Magnetism and Spin in Nanostructures [II]
Robert Young Toshiba Research Europe Ltd	[PA1-108]	<i>Inversion of exciton level splitting in quantum dots</i>
		Poster Session A1 - Formation and Characterization of Quantum Dots and Rings [I]
Evgeny Zibik University of Sheffield	[PB1-195]	<i>Singlet and triplet polaron lifetimes in n-type self-assembled InAs/GaAs quantum dots</i>
		Poster Session B1 - Formation and Characterization of Quantum Dots and Rings [II]