

Poster Session III - Friday 30 April - 09:00 – 10:30

- P.01 **Fabrication of densely distributed Silver Indium selenide nanorods by Ag⁺ ion irradiation**
Dinesh Pathak, GND University
- P.02 **Atomic scale analysis of self assembled GaAs/AlGaAs quantum dots grown by droplet epitaxy**
Joris Keizer, Eindhoven University of Technology
- P.03 **Some reasons of emission inhomogeneity in InAs quantum dot DWELL structures**
Tetyana Torchynska, ESFM-National Polytechnic Institute
- P.04 **Light-emitting diodes based on colloidal quantum dot-conducting polymer hybrids with reduced efficiency roll-off**
Wan Ki Bae, Seoul National University
- P.05 **Using small Si clusters as building blocks**
Aijiang Lu, Donghua University
- P.06 **Random lasing action in colloidal quantum dots**
Yujie Chen, Institute of Photonics, University of Strathclyde
- P.07 **Stimulated emission from colloidal quantum dots in a light-emitting polymer film**
Johannes Herrnsdorf, University of Strathclyde
- P.08 **Three-dimensional Ge/Si quantum dot crystals with small periodicities**
Gregor Mussler, Forschungszentrum Juelich
- P.09 **Bright, Color-Saturated Red, Green and Blue Light-Emitting Diodes Based on Colloidal Quantum Dots**
Jeonghun Kwak, Seoul National University
- P.10 **Microstructural characterisation of an InGaN-based sacrificial layer and quantum dot containing structure for micro-disk formation**
Haitham El-Ella, University of Cambridge
- P.11 **Optical Analysis of a series of size and shape-controlled Type- II CdTe/CdSe/CdTe Heterostructure Nanorods**
Kuntheak Kheng, CEA/CNRS/Université Joseph Fourier-Grenoble
- P.12 **The Effect of Segregation and Strain in InAs/GaAs Quantum Dots capped with a Strain Reduction Layer**
Vesel Haxha, University of Manchester
- P.13 **Effect of the In (Ga) interdiffusion and ionic implantation in InAs/GaAs annealed QDs**
Sihem Jaziri, Faculte des Sciences de Bizerte
- P.14 **One pot synthesis of bi-linker stabilized CdSe quantum dots**
Isabella Concina, CNR - INFM Università di Brescia
- P.15 **Photocurrent characterization of intraband transitions in GaN/AlN QDs**
Alon Vardi, Department of Electrical Engineering Technion
- P.16 **Vertically coupled InGaAs quantum dots for enhanced photovoltaic response**
Tsong-Sheng Lay, National Sun Yat-Sen University
- P.17 **Room-temperature glassy alloy field-effect transistor**
Mikio Fukuhara, Tohoku University
- P.18 **Self-assembled monolayer of colloidal PbS quantum dots on GaAs substrates**
Wei Lü, Toyota Technological Institute
- P.19 **Quasistatic Dielectric Constants of Colloidal Nanocrystals Measured by Scanning Capacitance Spectroscopy**
Irene Humer, TU Vienna
- P.20 **Optical response of quantum dot multilayer structures**
Le Minh Thu, National Chiao Tung University
- P.21 **Ge/Si nanostructures with quantum dots growth by ion-beam assisted heteroepitaxy**
Zhanna Smagina, Institute of Semiconductor Physics SB RAS
- P.22 **Optical and electrical properties of stacked binary InAs-GaAs quantum dot structures grown under Surfactant-mediated growth conditions**
Mohammad Alduraibi, University of Manchester
- P.23 **Atomic structure of InAs/InGaAsP/InP(001) quantum dashes**
Andrea Lenz, TU Berlin
- P.24 **Uniform spectral dynamics in QD subensembles of SOAs**

Ulrike Woggon, TU Berlin

- P.25 **An atomically resolved study of InGaAs quantum dot layers grown with an Indium flush step**
Joris Keizer, Eindhoven University of Technology
- P.26 **Novel Zeolite Templated Optical Nanomaterials**
Gary Baker, Nottingham Trent University
- P.27 **Record-low inhomogeneous broadening of site- and polarization-controlled quantum dots for nanophotonics**
Arun Mohan, EPFL, Laboratory of Physics of Nanostructures
- P.28 **Room temperature operation of 1.3 μm InAs/GaAs quantum dot lasers wafer-bonded onto Si substrates**
Katsuaki Tanabe, University of Tokyo
- P.29 **Micron-scale quantum dots/polymer nanocomposites free-standing membranes, spheres, tubes and rods**
Benoit Guilhabert, Institute of Photonics
- P.30 **Scanning Probe Microscopy of Subsurface GaSb/GaAs Quantum Dots**
Alexander Robson, Lancaster University
- P.31 **Influence of Sb on InAs/InP (311B) QD formation**
Murat Bozkurt, Eindhoven University of Technology
- P.32 **Low Density Metamorphic Quantum Dot structures with emission in the 1.3 - 1.55 μm window**
Luca Seravalli, IMEM-CNR Institute
- P.33 **A new challenge with random tunneling fluctuation for fluorescence intermittency of quantum dot light emitter**
Jaedong Lee, JAIST
- P.34 **InP and CdSe Quantum Dots: Synthesis, Conjugation and Cytotoxicity**
Hicham Chibli, McGill University
- P.35 **Displacement sensing with self assembled quantum dots**
Michael Metcalfe, The Joint Quantum Institute, NIST and University of Maryland
- P.36 **The study of multi-stacked InAs/InGaAs dot-in-a-well structures for quantum dot infrared photodetector by metal organic chemical vapour deposition**
Jungsub Kim, Seoul National University
- P.37 **Transfer properties at interface in CdSe-ZnPc hybrid heterojunction solar cell**
Sohee Jeong, Korea Institute of Machinery and Materials
- P.38 **Formation of highly anisotropic GaAs quantum dots on GaAs(001) substrate**
Masafumi Jo, NIMS
- P.39 **Electrical characterization of transparent memory device with metal-oxide quantum dots embedded in polyimide layer**
Eun Kyu Kim, Hanyang University
- P.40 **Fabrication and Optical Characterization of Silica-Encapsulated Single CdSe/ZnS Quantum Dot**
Isnaeni Isnaeni, Graduate School of Nanoscience & Technology (WCU)
- P.41 **Fluorescence Intermittency and Dark Exciton Study in Double Shell CdSe/ZnSe/ZnS Single Quantum Dot**
Isnaeni Isnaeni, Graduate School of Nanoscience & Technology (WCU)
- P.42 **Influence of Stop Band on Quantum Dot Emission of Quantum Dots-Conjugated Opal Photonic Crystals Structure** Isnaeni, Isnaeni
Isnaeni Isnaeni, Graduate School of Nanoscience & Technology (WCU)
- P.43 **Evolution of InAs wetting layers during the self-assembled formation of InAs/GaAs quantum dots**
Yonghai Chen, Institute of Semiconductors, Chinese Academy of Science
- P.44 **Improved droplet epitaxy technique for ultranarrow photoluminescence emission of GaAs/AlGaAs quantum dots**
Marco Abbarchi, NIMS
- P.45 **PbS quantum dots/P3HT heterojunction photovoltaics based on nanoporous TiO₂ photoanode for near-infrared light harvesting**
Jeong Ah Chang, KTICT (Korea Research Institute of Chemical Technology)
- P.46 **Vertical stacking of InAs quantum dots for polarization-insensitive semiconductor optical amplifiers**
Kengo Sasayama, Kobe University

- P.47 **InP quantum dots for solid state quantum gates and lasers**
Elisabeth Koroknay, IHFG Universität Stuttgart
- P.48 **AFM Nanolithography from Graphene Nanoribbons to the Ultimate Quantum Dot**
Reuben Puddy, University of Cambridge
- P.49 **Atomic Force Microscopy Crystal Defect Topography after MOVPE SK Dot Epitaxy**
Kamil Gradkowski, Tyndall National Institute
- P.50 **Investigating the core-shell structure of InP/ZnS colloidal quantum dots using synchrotron-based photoelectron spectroscopy**
Darren Graham, The University of Manchester
- P.51 **Influence of growth and capping layer temperatures on the properties of GaSb/GaAs quantum dots**
Mazliana Ahmad Kamarudin, Lancaster University
- P.52 **GaSb in GaAs: From Quantum Dots to Quantum Rings**
Mazliana Ahmad Kamarudin, Lancaster University
- P.53 **Targeting Colorectal Cancer with Cadmium Telluride Quantum Dots**
Kevin Critchley, University of Leeds
- P.54 **Physical properties of 808-nm InAlAs / AlGaAs quantum dots on GaAs substrate**
JinDong Song, KIST
- P.55 **Electroluminescence from isolated single indium gallium nitride quantum dots up to 150K**
Joachim Kalden, Institute of Solid State Physics, University of Bremen
- P.56 **Narrow PL peak from Ge(Si) self-assembled islands embedded between tensile-strained Si layers**
Mikhail Shaleev, Institute for Physics of Microstructures Russian Academy of Sciences
- P.57 **Proposal for a terahertz quantum cascade laser based on quantum dots in nanowires**
Thomas Grange, Walter Schottky Institut
- P.58 **Features of 2D-3D growth mode transition in heterostructures with strained and relaxed sublayers**
Dmitry Yurasov, Institute for Physics of Microstructures Russian Academy of Sciences
- P.59 **Withdrawn**
- P.60 **Electroluminescence of shape-engineered single InAs quantum dots in a light emitting μ -diode**
Minisha Mehta, University of Paderborn
- P.61 **Formation of low density InAs QDs in indirect bandgap Al(Ga)As matrix**
N. K. Cho, KIST
- P.62 **Low Thermal Budget Fabrication of III-V Quantum Nanostructures on Si Substrates**
Sergio Bietti, Dipartimento di Scienza dei Materiali / Università di Milano-Bicocca
- P.63 **Site-selective growth of InAs quantum dots on pre-patterned GaAs substrates**
Mathieu Helfrich, DFG-Center for Functional Nanostructures (CFN), Karlsruhe Institute of Technology (KIT)
- P.64 **Low-Computational-Cost Modelling of Intraband Absorption for Quantum-Dot-in-Well Structures**
Boon Hon Hong, University of Hull
- P.65 **A nano-patterning technique utilizing surface GaAs clusters as a mask for mesa structure fabrication**
Seung-kyu Ha, Korea Institute of Science and Technology (KIST)
- P.66 **Nanoscale characterisation of quantum dot materials by pulsed-laser atom probe tomography**
Michael Mueller, University of Oxford
- P.67 **Growth and magneto-optical studies of colloidal ZnMnO nanoparticles**
Andriy Savchuk, Chernivtsi National University
- P.68 **Inverted Ge islands in {111} faceted Si pits - a novel approach towards islands with higher aspect ratio**
Martyna Grydlik, University of Linz
- P.69 **High Specific Detection of Cancer Biomarkers in Protein Chips using CdSe/ZnS Quantum Dots**
Anisha Gokarna, Korea Advanced Institute of Science and Technology
- P.70 **Charge memory characteristics of CdSe/ZnS quantum dots in TiO₂ thin film**

Eui-Tae Kim, Chungnam National University

- P.71 **Gain and Phase Recovery in InAs/GaAs Quantum Dot Based Electro-Absorbers**
Jaroslaw Pulka, Tyndall National Institute
- P.72 **Quantum confinement in MOCVD-grown structures with self-assembled InAs/GaAs quantum dots**
Karla Kuldová, Institute of Physics of the AS CR, v. v. i.
- P.73 **Electro- and photoluminescence of InAs/GaAs quantum dot structures**
Jiri Oswald, Institute of Physics of the AS CR, v.v.i
- P.74 **Elastic strain engineering of quantum dot excitonic emission in nanomembranes and optical resonators**
Fei Ding, IFW-Dresden
- P.75 **An atomic scale study of the effect of Sb on the growth of II-V quantum dots**
Paul Koenraad, Eindhoven University of Technology
- P.76 **Theoretical modelling of quaternary GaInAsSb/GaAs self-assembled quantum dots**
Jose M. Llorens, Instituto de Microelectrónica de Madrid, CNM, CSIC
- P.77 **Enhancing spontaneous emission of colloidal quantum dots embedded in silicon nitride 2D-PhC nanocavities**
Antonio Quattieri, Italian Institute of Technology (IIT), Center for Bio-Molecular Nanotechnology
- P.78 **Development of unconventional GaAs nanostructures by Droplet Epitaxy**
Claudio Somaschini, Università di Milano-Bicocca
- P.79 **Electric polarizability of a magnetoexciton in A3B5 semiconductor quantum ring**
Areg Ghazaryan, Yerevan State University
- P.80 **Variational method of energy level calculation for quantum dots with a pyramidal shape**
Alexey Nenashev, Institute of Semiconductor Physics
- P.81 **Revisiting Carrier Multiplication in CdSe Nanocrystals**
Marco Califano, University of Leeds
- P.82 **Strain, alloys and the optical properties of colloidal quantum dots**
Vincent Veilleux, Centre d'optique, photonique et lasers (COPL)
- P.83 **Excitonic Effect on the Nonlinear Optical Properties of 3D Quantum Dots**
Jefferson Florez-Gutierrez, Universidad de los Andes
- P.84 **GaAsSb-capped InAs quantum dots: from enlarged quantum dot height to alloy fluctuations**
Jose Maria Ulloa, ISOM-Universidad Politecnica de Madrid
- P.85 **Self-assembled SiGe single-hole transistors**
Georgios Katsaros, CEA Grenoble
- P.86 **Effects of As₂ and As₄ sources on the optical properties of columnar quantum dots grown by molecular beam epitaxy**
Lianhe Li, University of Leeds
- P.87 **Ultrafast (<100 fs) Pulse Generation Using Dispersionless 1300 nm InAs/GaAs Quantum Dot Saturable Absorber Mirrors**
Edmund Clarke, Imperial College London
- P.88 **Bilayers for extending the wavelength of QD Lasers**
Mohammed Abdul Majid, University of Sheffield
- P.89 **Built-in fields in non-polar InGaN quantum dots**
Stefan Schulz, Tyndall National Institute
- P.90 **Purely radiative recombination up to room temperature in GaN/AlN QDs with microsecond decay times**
Bruno Gayral, CEA-Grenoble, INAC-SP2M
- P.91 **Combining X-TEM microscopy, PL and Raman spectroscopy to study the evolution of Si-nanocrystal size distributions in SiO₂**
Iain Crowe, University of Manchester
- P.92 **Magnetic and magneto-optical properties of CdS:Mn quantum dots in PVA matrix**
Volodymyr Fediv, Bukovinian State Medical University
- P.93 **μ-PL characterization of CdSe Quantum Dots grown on a ZnMgSSe barrier**
Ian Davidson, Heriot-Watt University
- P.94 **Narrow photoluminescence emission of Ge islands grown on pit-patterned Si(001) substrates at various temperatures**
Florian Hackl, Johannes Kepler University

- P.95 **Negative and positive photoresponse in quantum dot infrared photodetector structures**
Deborah Alvarenga, UFMG
- P.96 **Reduction of the photoluminescence linewidth of site-controlled InAs quantum dots by a double stack growth technique**
Tino Johannes Pfau, University of Kassel
- P.97 **The role of carrier diffusion in the performance and stability of InAs/GaAs QD lasers**
Peter Spencer, Imperial College London
- P.98 **Modelling of electronic states in InAs/GaAs quantum dots with GaAsSb strain reducing overlayer**
Petr Klenovský, Masaryk University
- P.99 **Monotonic evolution of the optical properties in the transition from three- to quasi-two-dimensional quantum confinement in InAs nanorods**
Theerapong Puangmali, University of Leeds
- P.100 **Catalyst-free metal-organic chemical vapor epitaxial growth of InN nanorods**
Minhwa Kim, Seoul National University
- P.101 **Pyramidal site controlled quantum dots: a route toward versatile and spectrally pure systems**
Valeria Dimastrodonato, Tyndall National Institute
- P.102 **STEM imaging of InP/(Al)GaInP quantum dots**
Yang Qiu, University of Sheffield
- P.103 **AFM-based photocurrent imaging of epitaxial and colloidal QDs**
Monika Madl, Vienna University of Technology
- P.104 **Photoluminescent studies of the GaAs quantum dots embedded into the AlGaAs nanowires**
Vladimir Katz, Ioffe Institute
- P.105 **Synthesis and optical characterisation of colloidal Type-II heterostructure ZnTe/ZnSe and ZnTe/ZnSe/ZnS nanoparticles**
Simon Fairclough, University of Oxford
- P.106 **Optical properties of colloidal HgS quantum dots in near-IR region**
Mikhail Artemyev, Institute for Physico-Chemical Problems of Belarussian State University
- P.107 **Neutralization of positively charged excitonic state in single InAs quantum dot by Si delta doping**
Naoto Kumagai, NanoQuine, The Univ. of Tokyo
- P.108 **Study of structural and electronic properties of metallic nanowires : Bi, Na, Cu, Pb**
Sarika Shrivastava, Gwalior Institute of Information Technology
- P.109 **Absorption Coefficient in Periodic InAs/GaAs Nanostructures**
Francisco Gómez-Campos, Universidad de Granada
- P.110 **Evolution of the Wetting Layer upon InAs deposition on GaAs(001)**
Holger Eisele, Technische Universität Berlin
- P.111 **Influence of In-plane Electric Field on the CdTe/CdMgTe Mixed Quantum Dots under THz Illumination**
Krzysztof Karpierz, University of Warsaw
- P.112 **The role of strain on the 2D-3D and quantum dot-quantum ring transitions during growth of InAs/GaAs and GaSb/GaAs nanostructures**
Holger Eisele, Technische Universität Berlin
- P.113 **Intraband optical properties of self-assembled columnar quantum dots**
Dragan Indjin, University of Leeds
- P.114 **Growth of three-dimensional InAs islands on (001) Si substrate**
Jin Dong Song, KIST
- P.115 **Polarization and coherence properties of semiconductor micropillar lasers**
Jean-Sebastian Tempel, Technische Universität Dortmund
- P.116 **The effect of wurtzite InGaN quantum well on electronic structures of shape-dependent wurtzite InGaN quantum dots**

- P.117 **The role of thickness and composition-dependent wurtzite InGaN quantum wells in optical characteristics of wurtzite InGaN quantum dots**
Wei-Yi Tsai, Institute of Applied Mechanics, National Taiwan University
- P.118 **Water-Soluble CdTe/CdS Core/shell Semiconductor Nanocrystals: Synthesis and Optical Properties**
Marco Schiavon, Universidade Federal de São João Del Rei – UFSJ
- P.119 **Improvement in Photoluminescence of Thiol-Stabilized Water Soluble Alloyed ZnSe(S) Nanocrystals**
Marco Schiavon, Universidade Federal de São João Del Rei – UFSJ
- P.120 **MOVPE grown InP QD based SESAMs operating at ~800 nm**
A B Krysa, University of Sheffield
- P.121 **Theoretical model of Intermediate Band Solar Cell based on InAs/GaAs QD arrays**
Stanko Tomic, STFC Daresbury Laboratory
- P.122 **Optimisation of single photon sources based on III-nitrides quantum dots**
Stanko Tomic, STFC Daresbury Laboratory
- P.123 **Kinetic Monte Carlo simulation of quantum-dot nucleation and growth in PbSe/PbEuTe multilayers**
Martin Mixa, Charles University in Prague
- P.124 **Bistability and opto-thermal-pulsation in quantum-dot edge-emitting lasers diode**
Alessio Tierno, University of Strathclyde
- P.125 **QD charge fluctuation in single electron detector (Photo-SET)**
Manel Troudi, Laboratory of Microelectronics and Instrumentation
- P.126 **Computational study of structure dependent properties of Q-dots**
Farzana Aslam, Coventry University
- P.127 **Carrier capture from quantum wire barriers into quantum dots: localization and thermionic emission effects**
Justyna Szeszko, Ecole Polytechnique Fédérale de Lausanne
- P.128 **Emission dynamics of type-II quantum dot systems**
Kamil Gradkowski, Tyndall National Institute
- P.129 **Concentration dependence of the optical properties of monodisperse colloidal quantum dot monolayers**
Manuela Lunz, Trinity College Dublin
- P.130 **High density quantum dots formation for intermediate band solar cells**
Dayong Zhou, Norwegian University of Science and Technology
- P.131 **Sorting thermodynamic and kinetic paths in the morphological transition from 2D to 3D dot growth**
Moritz Brehm, Institute of Semiconductor and Solid State Physics, University of Linz
- P.132 **Significant detection wavelength shift between wave function coupled and decoupled quantum dot infrared photodetector**
Wenquan Ma, Institute of Semiconductors, Chinese Academy of Sciences
- P.133 **Growth of Low Density InP/GaInP Quantum Dots**
Claire Elliott, University of Sheffield
- P.134 **Synthesis of Alloy, Core-shell and Onion Ring Ni/Zn-Oxide Quantum Dots**
Priten Khagram, University of Leeds