

Conference Program

15th EURO MBE WORKSHOP

Piłsudski Room, Hotel Belvedere, Zakopane, Poland, March 8-11, 2009

Conference Program

Sunday, March 8th, 2009

11.00 - 20.00 Registration
18.00 Welcome Glass Of Wine
19.00 Welcome Party sponsored by Veeco

Monday, March 9th, 2009

8.15 - 8.30 Opening

Session MoA:	Nitrides (1)	8.30 - 10.00
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MoA1 8.30 - 9.00

Recent progress in growth of III-N nanocolumns with polar and nonpolar orientation

Calleja, E., Grandal, J., Fernández, S., Sánchez, M.A., Gallardo, E., Calleja, J.M., Luna, E Trampert, A., Jahn, U

ISOM, Dpto. Ingeniería Electrónica Madrid, SPAIN

MoA2 9.00 - 9.15

Catalyst-free growth of GaN nanocolumns on r-plane sapphire by molecular beam epitaxy

Kunert, G., Kruse, C., Aschenbrenner, T., Figge, S., Hommel, D., Sebald, K., Kalden, J., Voss, T., Gutowski, J

University of Bremen , GERMANY

MoA3 9.15 - 9.30

PAMBE growth, structural anisotropy and properties of non-polar a-plane and m-plane InN

Koblmueller, G., Hirai, A., Wu, F., Gallinat, C.S., Metcalfe, G., Shen, H., Wraback, M., Speck, J.S.

Santa Barbara California, USA

MoA4 9.30 - 9.45

Structural properties of non-basal plane AlGaIn by ammonia MBE

Young, E., Gallinat, C.S., Hirai, A., Speck, J.S.

Santa Barbara California, USA

MoA5 9.45 - 10.00

A comprehensive diagram to grow InAlN alloys by plasma-assisted molecular beam epitaxy

Fernández-Garrido, S., Gačević, Ž., Calleja, E., Redondo-Cubero, A., Gago, R., Muñoz, E.

ISOM, Dpto. Ingeniería Electrónica Madrid, SPAIN

Coffee Break (10.00 - 10.30)

Session MoB:	II-VI and Oxides	10.30 - 12.15
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MoB1 10.30 - 11.00

MBE Growth and Properties of Telluride Nanostructures

Wojtowicz, T.

Institute of Physics, PAS, POLAND

MoB2 11.00 - 11.30

Epitaxy of high-k oxides

Osten, H.J.

Institute of Electronic Materials and Devices (MBE), Leibniz University, GERMANY

MoB3 11.30 - 11.45

CdSe quantum dots in ZnSe nanowires as efficient source for single photons up to 220K

Aichele, T., Bellet-Amalric, E., Kheng, K., Tribu, A., Sallen, G., Bougerol, C., André, R., Poizat, J P., Genuist, Y, Tatarenko, S.

Humboldt-Universität zu Berlin, GERMANY

MoB4 11.45 - 12.00

Formation behaviour of epitaxial PbTe/CdTe quantum dots

Groiss, H., Kaufmann, E., Kriechbaumer, S., Springholz, G., Schwarzl, T., Hesser, G., Schäffler, F., Heiss, W., Koike, K., Harada, H., Yano, M., Wojtowicz, T., Werner, P.

Johannes Kepler University, AUSTRIA

MoB5 12.00 - 12.15

Epitaxial Oxide Dielectric Thin Films on Si and GaN Deposited using MBE

Lichtenwalner, D., Hydrick, J. M., Wheeler, V.D., Johnson, M.A.L., Jur, J.S., Kingon, A.I.

North Carolina SU, USA

Break (12.15 – 17.00)

Session MoC:	Low dimensional structures (1)	17.00 - 19.00
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MoC1 17.00 - 17.30

InSb/InAs type-II QD nanostructures for mid-IR optoelectronic applications

Solovev, V.A.

loffe Physico-Technical Institute, RUSSIA

MoC2 17.30 - 18.00

Si/SiGe islands grown on patterned substrates"

Chen, G., Vastola, G., Pachinger, D., Bauer, G., Jantsch, W, Miglio, L., Schäffler, F.

Johannes Kepler University, AUSTRIA

MoC3 18.00 - 18.15

Directing Self Assembly and Defect Formation in Compound Semiconductors

Mirecki Millunchick, J., Lee, J., Noordhoek, M., Thomas, J.C., Bickel, J., Sears III, L.

University of Michigan, USA

MoC4 18.15 - 18.30

1.3 – 1.5 μm GaAsSb-capped InAs quantum dots: effect of the Sb content on the structural and optical properties

Ulloa, J.M., del Moral, M., Gargallo, R., Montes, M., Guzman, A., Hierro, A., Bozkurt, M., Koenraad, P.M.

ISOM, Dpto. Ingeniería Electrónica Madrid, SPAIN

MoC5 18.30 - 18.45

Phase Diagrams of Self-Assembled PbSeTe Quantum Dot Growth

Lugovyy, D., Springholz, G.

Johannes Kepler University, AUSTRIA

MoC6 18.45 - 19.00

Growth of Si and Ge nanowires by Molecular Beam Epitaxy

Porret, C., Dujardin, R., Poydenot, V., Devillers, T., Favre-Nicolin, V., Renevier, H., Noé, P., Gentile, P., Pauc, N., Barski, A.

CEA Grenoble, FRANCE

Session MoP:	Poster Session I	19.00 - 20.30
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MoP1 *Metamorphic Te doped AlInSb/GaSb heterostructures*

Desplanque, L., Delhay, G., Androussi, Y., Wallart, X.

Institut of Electronic Microelectronic and Nanotechnology, Cedex, FRANCE

MoP2 *Patterned backgating of electron-hole bilayer structures*

Farrer, I., Croxall, A.F., Das Gupta, K., Nicoll, C.A., Waldie, J., Beere, H.E., Thangaraj, M., Ritchie, D.A., Pepper, M.

Cavendish Laboratory, Cambridge, UNITED KINGDOM

MoP3 *Self-assembled InAs quantum dots grown by solid-source molecular beam epitaxy on InP (001)*

Fuster, D., Rivera, A., Alén, B., Alonso-González, P., González, Y., González, L.

Instituto de Microelectrónica de Madrid, SPAIN

MoP4 *Effect of a lattice-matched GaAsSb capping layer on the structural properties of InAs/InGaAs/InP quantum dots*

Ulloa, J.M., Koenraad, P.M., Bonnet-Eymard, M., Létoublon, A., Bertru, N.

ISOM, Dpto. Ingeniería Electrónica Madrid, SPAIN

MoP5 *Temperature dependent photoluminescence of MBE-grown PbTe quantum dots in a II-VI matrix and calculation of the optical transition energies*

Schwarzl, T., Kaufmann, E., Springholz, G., Koike, K., Hotei, T., Yano, M., Heiss, W.

University of Linz, AUSTRIA

MoP6 *Widely tunable and intense mid-infrared PL emission from epitaxial Pb(Sr)Te quantum dots in a CdTe matrix*

Kierchbaumer, S., Schwarzl, T., Groiss, H., Wojtowicz, T., Springholz, G.

Johannes Kepler University, AUSTRIA

MoP7 *Crystalline Si growth on a insulating LaAlO₃ (001) substrate*

Mortada, H., Dentel, D., Derivaz, M., Bischoff, J. L.

Université de Haute Alsace, FRANCE

MoP8 *Self-assembled Si_{1-x}Ge_x nanowires on Si(1 1 10) substrates*

Chen, G., Vastola, G., Pachinger, D., Groiss, H., Stangl, J., Wintersberger, W., Bauer, G., Jantsch, W., Miglio, L., Schäffler, F.

Johannes Kepler University, AUSTRIA

MoP9 *MBE-growth and electrical properties axial Si/SiGe nanowires*

Nguyen-Duc, T-K., Wolfsteller, A., Das Kanugo, P., Bauer, J., Breitenstein, O., Zakharov, N.D., Werner, P., Gösele, U.

Max-Planck-Institut für Mikrostrukturphysik, GERMANY

MoP10 *Group III Element-Assisted MBE Grown GaAs and InAs Nanowires*

Lepsa, M., Heiderich, S., Alagha, S., Weis, K., Estévez-Hernández, S., Schäpers, Th., Grützmaier, D.

Institute of Bio- and Nanosystems Research Centre Jülich GmbH, GERMANY

- MoP11 *Wurtzite to zinc blende phase transition in GaAs nanowires induced by epitaxial burying*
Patriarche, G., Glas, F., Tchernytcheva, M., Sartel, C., Largeau, L., Harmand, J-C., Cirlin, G.E.
 Laboratoire de Photonique et de Nanostructures, CNRS, FRANCE
- MoP12 *Nucleation of Au-induced GaAs Nanowires on Si(111) and GaAs(111)B*
Breuer, S., Geelhaar, L., Pfüller, C, Wagler, M., Brandt, O., Trampert, A., Riechert, H.
 Paul-Drude-Institute for Solid State Electronics, GERMANY
- MoP13 *Heteroepitaxy of tilted GaAs nanowires on surface treated Si substrates*
Detz, H., Klang, P., Andrews, A.M., Hyun, Y.J., Lugstein, A., Schrenk, W., Strasser, G.
 Vienna University of Technology, AUSTRIA
- MoP14 *Fabrication of GaAs Quantum Dots by Droplet Epitaxy on Silicon/Germanium Virtual Substrate*
Bietti, S., Somaschini, C., Koguchi, N., Sanguinetti, S.
 Università di Milano Bicocca, ITALY
- MoP15 *Influence of the deposited material on the structural and photoluminescence properties of InGaAs/GaAs quantum dots*
Gushterov, A., Lingys, L., Reithmaier, J.P.
 Universität Kassel, GERMANY
- MoP16 *Fabrication of GaAs Concentric Multiple Quantum Rings by Droplet Epitaxy*
Somaschini, C., Bietti, S., Sanguinetti, S., Koguchi, N.
 Università di Milano Bicocca, ITALY
- MoP17 *Kinetics of InAs/GaAs dot-to-ring evolution*
Biasiol, G., Baranwal, V., Heun, S., Sorba, L.
 Laboratorio Nazionale TASC INFN-CNR, Trieste, ITALY
- MoP18 *Formation of laterally coupled In(Ga)As quantum dot pairs on GaAs nanoholes obtained by droplet epitaxy*
Alonso-González, P.
 Instituto de Microelectrónica de Madrid, SPAIN
- MoP19 *Low density InAs/(In)GaAs quantum dots emitting at long wavelength*
Trevisi, G., Seravalli, L., Frigeri, P., Franchi, S.
 CNR - IMEM Institute, Parma, ITALY
- MoP20 *Optoelectronic devices based on (Ga,In)(As,N) Quantum dots*
Gargallo Caballero, R., Guzmán, A., Hopkinson, M., Hierro, A., Ulloa, J.M., Calleja, E.
 ISOM, Dpto. Ingeniería Electrónica Madrid, SPAIN
- MoP21 *Photoreflectance and micro-photoluminescence of GaInNAs quantum wells and InNAs quantum dots embedded in GaInNAs quantum wells*
Kudrawiec, R., Sek, G., Misiewicz, J., Bisping, D., Marquardt, B., Fischer, M., Forchel, A.
 Institute of Physics, Wroclaw, POLAND
- MoP22 *X-ray photoemission study of segregation phenomena at AlSb/InAs interfaces*
Wallart, X., Desplanque, L., Godey, S.
 Responsable Groupe EPIPHY, FRANCE
- MoP23 *Dependence of InAs growth selectivity on GaAs(001) patterned substrates on As₄ pressure and surface reconstruction*
Herranz, J., Martín-Sánchez, J., González, Y., González, P.A., Alén, B., Fuster, D., González, L.,
 Briones, F., Muñoz-Matutano, G., Canet-Ferrer, J., Martínez-Pastor, J.,
 Instituto de Microelectrónica de Madrid, SPAIN

- MoP24 *Mapping Structure, Chemical Composition and Strain in Epitaxial InGaAs Nanostructures*
Clarke, R., Kumah, D., Cionca, C., Willmott, P.R., Schlepütz, C.M., Mirecki Millunchick, J., Yacoby, Y.
 University of Michigan, USA
- MoP25 *Physical properties of 4H-SiC(0001) surface - DFT investigation*
Sottys, J., Krukowski, S.
 Institute of High Pressure Physics PAS, POLAND
- MoP26 *Weak Antilocalization in GaN/AlGaN Heterostructures*
Dybko, K., Siekacz, M., Knap, W., Skierbiszewski, C.
 Institute of Physics PAS, POLAND
- MoP27 *Si and Mg Doped GaN and InN Nanowires*
Calarco, R., Stoica, T., Meijers, R.J., Sutter, E., Richter, T., Jeganathan, K., Debnath, R.K., Marso, M., Lüth, H., Grützmacher, D.
 Institute of Bio- and Nanosystems Research Centre Jülich, GERMANY
- MoP28 *Realization and characterization of GaN nanocolumns grown on Si(111) by MBE using ammonia*
Vézian, S., Massies, J.
 CNRS-CRHEA, Valbone, FRANCE
- MoP29 *M-plane and a-plane GaN quantum wells grown by ammonia MBE on HVPE grown ELO structures*
Martin, D., Zhu, T., Dussaigne, A., Grandjean, N.
 Ecole Polytechnique Federale de Lausanne, SWITZERLAND
- MoP30 *(Ga,In)N/GaN multiple quantum well light emitting diodes grown on Si(111) and Si(110) substrates*
Damilano, B., Natali, F., Brault, J., Huault, T., Lefebvre, D., Tauk, R., Frayssinet, E., Moreno, J.C., Cordier, Y., Semond, F., Chenot, S., Massies, J.
 CNRS-CRHEA, Valbone, FRANCE
- MoP31 *Low density Stranski-Krastanov self-assembled GaN/AlN quantum dots for single dot spectroscopy*
Dussaigne, A., Simeonov, D., Demangeot, F., Butté, R., Grandjean, N.
 Ecole Polytechnique Federale de Lausanne, SWITZERLAND
- MoP32 *Improved N-rich growth of AlGaIn/GaN electronic device structures by PA-MBE in the GaN thermal decomposition regime*
Koblmueller, G., Chu, R., Raman, A., Wu, F., Mishra, U.K., Speck J. S.
 Santa Barbara California, USA
- MoP33 *Properties of bulk ammonothermal GaN substrates for homoepitaxy*
Dwiliński, R., Doradziński, R., Garczyński, J., Sierzputowski, L.P., Puchalski, A., Rudziński, M., Zając, M.
 AMMONO sp. z o.o., POLAND
- MoP34 *Determination of the composition of InGaIn quantum well grown by Plasma Assisted MBE using geometric phase analysis of HRTEM images*
Smalc-Koziorowska, J., Dimitrakopoulos, G.P., Siekacz, M., Szańkowska, M., Grzegory, I., Skierbiszewski, C.
 Institute of High Pressure Physics PAS, POLAND
- MoP35 *Natural quantum dots in the InAs/GaAs wetting layer*
Babinski, A., Borysiuk, J., Kret, S., Czyz, M., Golnik, A., Kossacki, P., Gaj, J.A., Potemski, M., Raymond, S., Wasilewski, Z.R.
 National Research Council of Canada, CANADA

Tuesday, March 10th, 2009

Session TuA:	Low dimensional structures (2)	8.30 - 10.00
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TuA1 8.30 - 9.00

Single photon sources for quantum cryptography

Ritchie, D.A., Stevenson, R.M., Young, R.J., Hudson, A.J., Ellis, D.J.P., Bennett, A.J., Ward, M.B., Intallura, P.M., Atkinson, P., Cooper, K., Nicoll, C.A., Shields, A.J.

Department of Physics, University of Cambridge, UNITED KINGDOM

TuA2 9.00 - 9.15

Three-dimensional Ge/Si quantum dot crystals with small periodicities

Mussler, G., Dais, C., Solak, H., Fromherz, T., Stangl, J., Grützmacher, D.

Institute of Bio- and Nanosystems Research Centre Jülich GmbH, GERMANY

TuA3 9.15 - 9.30

High indium content InGaN/GaN single quantum wells for green emission

Dussaigne, A., Locher, R., Martin, D., Grandjean, N.

Ecole Polytechnique Federale de Lausanne, SWITZERLAND

TuA4 9.30 - 9.45

Growth and Optical Studies of Highly Ordered InAs Quantum Dot Arrays Obtained by Cleaved Edge Overgrowth

Uccelli, E., Bichler, M., Abstreiter, G., Fontcuberta i Morral, A.

Walter Schottky Institute – Technical University Munich, GERMANY

TuA5 9.45 - 10.00

MBE Growth of III-N Air-bridge Photonic Crystals and GaN Quantum Dots for UV Range Lasers Applications

Sergent, S., Moreno, J.C., Frayssinet, E., David, S., Checoury, X., Boucaud, P., Leroux, M., Semond, F.

CNRS-CRHEA, Valbone, FRANCE

Coffee Break (10.00 - 10.30)

Session TuB:	Nitrides (2)	10.30 - 12.15
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TuB1 10.30 - 11.00

Plasma-assisted MBE of GaN-based nanostructures for intersubband devices

Monroy, E., Kandaswamy, P.K., Lahourcade, L., Wirthmüller, A., Bougerol, C.

CEA Grenoble, FRANCE

TuB2 11.00 - 11.15

Nonpolar cubic AlGaIn/GaN heterojunction field effect transistors grown by molecular beam epitaxy (MBE) on 3C SiC/Si (001)

Tschumak, E., Pezoldt, J., As, D.J.

University of Paderborn, GERMANY

TuB3 11.15 - 11.30

Growth and characterization of lattice-matched InAlN/GaN Bragg reflectors grown by plasma assisted molecular beam epitaxy

Gacevic, Z., Fernández-Garrido, S., Calleja, E., Luna, E., Trampert, A.

ISOM, Dpto. Ingeniería Electrónica Madrid, SPAIN

TuB4 11.30 - 11.45

MBE growth of AlGaIn/GaN heterostructures on Si(110) substrate

Cordier, Y., Moreno, J.-C., Baron, N., Frayssinet, E., Damilano, B., Chenot, S., Semond, F., Chauveau, J.-M.
CNRS-CRHEA, Valbonne, FRANCE

TuB5 11.45 - 12.00

InN/InGaIn multiple quantum wells emitting at 1.5 μ m

Grandal, J., Bengoechea, A., Sánchez-García, M.A., Calleja, E., Luna, E., Trampert, A., Gallardo, E.,
Calleja, J.M.
ISOM, Dpto. Ingeniería Electrónica Madrid, SPAIN

TuB6 12.00 - 12.15

Comparison of the properties of Group-III nitrides grown by plasma-MBE and ammonia-MBE

Natali, F., Cordier, Y., Massies, J., Damilano, B., Vezian, S., Leroux, M.
RIBER S.A. GaN Process Technology Center, FRANCE

Break (12.15 – 17.00)

Session TuC:	Novel Materials and MBE Fundamentals	17.00 - 19.00
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TuC1 17.00 - 17.30

Coherent Epitaxy of Semiconductor/Metal Nanostructures

Dietl, T.

Institute of Physics PAS, POLAND

TuC2 17.30 - 18.00

Growth of Heusler alloy semiconductor heterostructures and effect of interface perfection on spin injection efficiencies

Herfort, J.

Paul-Drude-Institut für Festkörperelektronik Berlin, GERMANY

TuC3 18.00 - 18.15

Surfactant-mediated wetting layer reduction during Stranski-Krastanov growth of tensely strained Si on Ge(001) substrates

Pachinger, D., Groiss, H., Teuchtmann, M., Schäffler, F.

Johannes Kepler University, AUSTRIA

TuC4 18.15 - 18.30

Growth and structural characterization of a 2D graphene/Ge/SiC(0001) heterostructure

Mortada, H., Alves, E., Barradas, N.P., Dentel, D., Derivaz, M., Bischoff, J.-L.

Université de Haute Alsace, FRANCE

TuC5 18.30 - 18.45

Kinetics of strain-free Volmer-Weber growth: Fe₃Si on GaAs(001)

Braun, W., Kaganer, V.M., Jenichen, B., Shayduk, R., Riechert, H.

Paul-Drude-Institute for Solid State Electronics, GERMANY

TuC6 18.45 - 19.00

In-situ study of catalyst-induced GaN nanowire nucleation

Cheze, C., Geelhaar, L., Trampert, A., Brandt, O., Riechert, R.

Paul-Drude-Institute for Solid State Electronics, GERMANY

- TuP1 *Monolithic distributed Bragg reflectors and microcavities lattice matched to ZnTe*
Kruse, C., Figge, S., Jakubczyk, T., Golnik, A., Gaj, J.A., Hommel, D.
University of Bremen, GERMANY
- TuP2 *Defect Structure of MBE-Grown HgCdTe Studied with Ion Milling*
Pociask, M., Izhnin, I.I., Dvoretzky, S.A., Mikhailov, N.N., Sidorov, Yu.G., Varavin, V.S., Mynbaev, K.D.
Institute of Physics, University of Rzeszów, POLAND
- TuP3 *Technique of making good electrical contacts to high resistivity (Cd,Mn) Te crystals using MBE technique*
Witkowska-Baran, M., Kochanowska, D., Mycielski, A., Szadkowski, A.J., Jakiela, R., Witkowska, B., Kaliszek, W., Domagała, J., Łusakowska, E., Domukhovski, V., Dybko, K., Cui, Y., James, R.
Institute of Physics PAS, POLAND
- TuP4 *Structural and magnetic properties of ferromagnetic Ge_{1-x}MnxTe grown by MBE*
Lechner, R., Springholz, G., Hassan, M., Kirchschrager, R., Groiss, H., Bauer, G.
Johannes Kepler University, AUSTRIA
- TuP5 *Growth and switching of epitaxial Ge₂Sb₂Te₅ phase change memory materials*
Shayduk, R., Braun, W., Flissikowski, T., Ramsteiner, M., Grahn, H.T., Riechert, H., Fons, P., Kolobov, A., Abou-Ras, D.
Paul-Drude-Institute, GERMANY
- TuP6 *Material studies for quantum dot intermediate band solar cells*
Thomassen, S.F., Reenaas, T.W., Fimland, B-O., Wang, S., Sadeghi, M.
Norwegian University of Science and Technology, NORWAY
- TuP7 *Investigation of the Hysteretic Phenomena in RHEED Intensity Change in the Study of Surface Reconstruction*
Nemcsics, A., Takács, J.
Institute for Microelectronics and Technology, HUNGARY
- TuP8 *Photonic Crystal Terahertz Quantum Cascade Laser*
Andrews, A.M., Benz, A., Deutsch, Ch., Fasching, G., Unterrainer, K., Klang, P., Schrenk, W., Strasser, G.
Vienna University of Technology, AUSTRIA
- TuP9 *A 13 GHz Bandwidth 1310 nm GaInNAs Triple QW Laser*
Zhao, H., Haglund, Å., Wang, S.M., Gustavsson, J.S., Sadeghi, M., Larsson, A.
Chalmers University of Technology, SWEDEN, SWEDEN
- TuP10 *1.22 μm GaInNAs Saturable Absorber Mirrors with Tailored Recovery Time*
Puustinen, J., Guina, M., Korpijärvi, V-M., Marcinkevicius, S., Albrecht, M., Tukiainen, A., Kivistö, S., Pessa, M.
Tampere University of Technology, FINLAND
- TuP11 *Doping influence on structural property of linearly graded composition InGaAs buffer layer grown by MBE*
Song, Y., Wang, S., Tångring, I., Lai, Z., Sadeghi, M., Larsson, A.
Chalmers University of Technology, SWEDEN
- TuP12 *Very high tensile strain and lattice relaxation in MBE grown GaMnAs layers deposited on InGaAs/GaAs(100) buffers*
Sadowski, J., Domagała, J.Z., Dłużewski, P., Kret, S., Kanski, J.
Lund University, FINLAND

- TuP13 *Anti-phase domains studied by high resolution X-ray scattering on GaP/Si(001) epilayers grown by SSMBE*
Guo, W., Létoublon, A., Cornet, C., Bondi, A., Moréac, A., Durand, O., Le Corre, A., Even, J., Loualiche, S.
 INSA Rennes, FRANCE
- TuP14 *Growth rate and mole fraction dependence on temperature during the growth of Ga_{1-x}In_xAs by chemical beam epitaxy using triethylgallium, trimethylindium and tertiarybutylarsine*
Ghita, D., Plaza, J., Sánchez, M., Climent-Font, A., García, B.J.
 Universidad Autonoma de Madrid, Applied Physics Department, SPAIN
- TuP15 *Relaxation Analysis of Tensile-Strained GaInP by Means of Strain-Induced Wafer Curvature*
Hakkarainen, T., Schramm, A., Toikkanen, L., Tukiainen, A., Pessa, M.
 Tampere University of Technology, FINLAND
- TuP16 *X-ray structural characterization of GaSb/GaAs(111)A heterostructures*
Domagała, J., Sadowski, J., Łusakowska, E.
 Institute of Physics PAS, POLAND
- TuP17 *Epitaxial regrowth on micro- and nano-patterned (001) GaAs surfaces: Surface preparation, growth front evolution and quantum dot localization*
Desplats, O., Arnoult, A., Lacoste, G., Ghita, D., Fontaine, C., Ponchet, A., Gatel, C., Monier, G., Bideux, L.
 LAAS-CNRS Toulouse, FRANCE
- TuP18 *Low threshold current density of InAs quantum dash laser on InP (100) through optimizing double cap technique*
Zhou, D., Piron, R., Dontabactouny, M., Dehaese, O., Grillot, F., Batte, T., Tavernier, K., Even, J., Loualiche, S.
 Trondheim, NORWAY
- TuP19 *Surface step patterns due to step kinetic anisotropy formed during epitaxial growth of GaN layers*
Krzyżewski, F., Załuska-Kotur, M., Krukowski, S.
 Institute of High Pressure Physics PAS, POLAND
- TuP20 *Epitaxial AlN on silicon for MEMS applications*
Moreno, J.C., Sergent, S., Frayssinet, E., Semond, F.
 CNRS-CRHEA, Valbone, FRANCE
- TuP21 *From GaN Nanodot template to GaN Nanowires*
Calarco, R., Debnath, R.K., Stoica, T., Besmehn, A., Jeganathan, K., Sutter, E., Meijers, R.J., Lüth, H., Grützmacher, D.
 Institute of Bio- and Nanosystems Research Centre Jülich, GERMANY
- TuP22 *In-situ RHEED study of catalyst-free MBE-grown GaN nanowires*
Knelangen, M., Gotschke, T., Geelhaar, L., Trampert, A., Riechert, H.
 Paul Drude Institut, GERMANY
- TuP23 *Nitrogen equilibrium site and dynamics at GaN(0001) surface - DFT investigation*
Strak, P., Krukowski, S.
 Institute of High Pressure Physics PAS, POLAND
- TuP24 *Residual strain in non-polar a-plane Zn_{1-x}Mg_xO (0<x<0.55) and its effect on the band structure of (Zn,Mg)O/ZnO quantum wells grown by MBE*
Chauveau, J-M., Teisseire, M., Laügt, M., Vives, J., Zuniga-Perez, J., Deparis, C., Morhain, C., Vinter, B.
 CNRS-CRHEA, Valbone, FRANCE
- TuP25 *Structural analysis of epitaxial Gd₂O₃ layers grown on Si(111)*
Watahiki, T., Shayduk, R., Braun, W., Große, F., Riechert, H.
 Paul-Drude-Institute, GERMANY

- TuP26 *Physical properties of GaN(0001) surface in ammonia-rich conditions static and dynamic DFT studies*
Kempisty, P., Krukowski, S.
 IWC PAN, POLAND
- TuP27 *Scanning Tunneling Microscopy Investigation of Ge and Si Molecular Beam Epitaxy on Ge (001) Substrates*
Matei, D., Sanduijav, B., Springholz, G.
 Johannes Kepler University, AUSTRIA
- TuP28 *In situ Scanning Tunneling Microscopy Studies of Ge Nanoisland Growth on 1D-Stripe Patterned Si (001) Substrates*
Sanduijav, b., Matei, D., Chen, G., Springholz, G.
 Johannes Kepler University, AUSTRIA
- TuP29 *Strained Silicon_on_Porous Silicon Heterostructures as Pseudosubstrates for Molecular Beam Epitaxy*
Blanchard, N.P., Boucherif, A., Regreny, P., Marty, O., Lysenko, V., Grenet, G.
 Université de Lyon, FRANCE
- TuP30 *Ge Dot Positioning and Electrical Functionalisation on Si(001)*
Kirfel, O., Karmous, A., Oehme, M., Kasper, E., Schulze, J., Gräbeldinger, H., Schweizer, H.
 Institut für Halbleitertechnik, Stuttgart, GERMANY
- TuP31 *Ion-beam assisted deposition of Ge nanocrystals on SiO2*
Stepina, N., Dvurechenskii, A.V., Armbrister, V.A., Kirienko, V.V., Novikov, P.L., Kesler, V.G.,
 Gutakovskii, A.K.
 Novosibirsk, RUSSIA
- TuP32 *High Curie Temperature ferromagnetism in Ge_{1-x}Mnx self-organized nanocolumns*
Devillers, T., Jamet, M., Barski, A., Porret, C., Bayle-Guillemaud, P., Rothman, J., Bellet-Amalric, E.,
 Marty, A., Cibert, J., Favre-Nicolin, V., Cherifi, S., Tardif, S.
 CEA Grenoble, FRANCE
- TuP33 *Low Values of GaInN Refractive Indices for Plasma Waveguide at Telecommunication Wavelengths*
Cywiński, G., Kudrawiec, R., Rzodkiewicz, W., Feduniewicz-Żmuda, A., Siekacz, M., Kryško, M.,
 Szańkowska, M., Litwin-Staszewska, E., Prystwako, P., Misiewicz, J., Skierbiszewski, C.
 Institute of High Pressure Physics PAS, POLAND
- TuP34 *Portable UHV synchrotron MBE system at ANKA*
 Slobodskyy, T., Stankov, S., B. Krause, B., Bauer, S., Schwarz, T., Baumbach, T.
 Institut für Synchrotronstrahlung / ANKA, Forschungszentrum Karlsruhe, GERMANY

Wednesday, March 11th, 2009

Session WeA:

8.30 - 10.00

WeA1 8.30 - 9.00

MBE grown dilute nitride and antimonide based disk lasers

Guina, M., Korpijärvi, V-M., Suomalinen, S., Härkönen, A., Rautiainen, J., Okhotnikov, O., Pessa, M.
Tampere University of Technology, FINLAND

WeA2 9.00 - 9.15

Short wavelength strain-compensated InGaAs-AlAs(Sb) quantum cascade lasers

Zhang, S., Revin, D., Commin, P., Cockburn, J., Kennedy, K., Krysa, A., Hopkinson, M.
University of Sheffield, UNITED KINGDOM

WeA3 9.15 - 9.30

Recombination Dynamics in Quantum Dot Semiconductor Saturable Absorber Mirrors (QD-SESAMs)

Golling, M., Maas, D. J. H. C., Bellancourt, A-R., Hoffmann, M., Rudin, B., Südmeyer, T., Keller, U.
ETH Zurich, SWITZERLAND

WeA4 9.30 - 9.45

Microdisk lasers operating in continuous-wave mode at 5.3 μm grown by MBE

Eibelhuber, M., Schwarzl, T., Springholz, G., Heiss, H.
University of Linz, AUSTRIA

WeA5 9.45 - 10.00

MBE Growth of AlGaAs/GaAs Quantum Cascade Laser Structures

Kosiel, K., Bugajski, M., Kubacka-Traczyk, J., Szerling, A., Karbownik, P., Muszalski, J., Romanowski, P.
Instytut Elektroniki, Warsaw, POLAND

Coffee Break (10.00 - 10.30)

Session WeB:

10.30 - 12.30

WeB1 10.30 - 11.00

The integration of III-V on Si via the growth on oxides

Saint-Girons, G., Cheng, J., Regreny, P., Patriarche, G., Largeau, L., Rojo-Romeo, P., Seassal, C., Niu, G., Vilquin, B., Hollinger, G.
Lyon Institute of Nanotechnology, FRANCE

WeB2 11.00 - 11.15

Scattering and Disorder in Ultra-high Mobility 2DEG

Umansky, V., Heiblum, M., Gross, Y., Dolev, M.
Weizmann Institute of Science, ISRAEL

WeB3 11.15 - 11.30

Growth of Scandium Nitride films by Plasma-Assisted Molecular Beam Epitaxy

Hall, J., Moram, M.A., Novikov, S.V., Sanchez, A., Campion, R.P., Kent, A.J., Foxon, C.T., Humphreys, C.J.
University of Nottingham, UNITED KINGDOM

WeB4 11.30 - 11.45

Interfacial intermixing in InAs/GaSb short-period-superlattices grown by molecular-beam-epitaxy

Luna, E., Satpati, B., Hong, B.H., Rybchenko, S.I., Rodriguez, J.B., Baranov, A.V., Tournié, E., Trampert, A.
Paul-Drude-Institute, GERMANY

WeB5 11.45 - 12.00

Optimized MBE growth technique for GaSb-based edge emitters at 2.7 μm

Kashani-Shirazi, K., Bachmann, A., Arafin, S., Vizbaras, K., Ziegler, S., Amann, M-C.
Walter Schottky Institut, GERMANY

WeB6 12.00 - 12.15

GaAs/AlGaAs quantum well heterostructures with low-temperature electron transport mobilities exceeding $15 \times 10^6 \text{ cm}^2/\text{Vs}$

Schuh, D., Reichl, C., Gronwald, I., Heider, S., Furthmeier, M., Wegscheider, W.
Uni Regensburg - Lst. Wegscheider, GERMANY

WeB7 12.15 - 12.30

Autocatalytic MBE growth of GaAs nanowires on oxidized Si(100)

Sadowski, J., Dlużewski, P., Kanski, J., Presz, A.
Lund University, FINLAND

Closing 12.30