NANOWIRES'15

BARCELONA, SPAIN, OCTOBER 26TH-30TH 2015



NANOWIRE GROWTH WORKSHOP NANOWIRES WORKSHOP

congresses.icmab.es/nanowires2015

PROGRAM COMMITTEES:

Nanowires Growth Workshop:

Lutz Geelhaar (Chair) (PDI Berlin, Germany)

Nanowires:

Jordi Arbiol (Chair) (ICREA & ICN2, Catalonia, Spain)
Riccardo Rurali (Chair) (ICMAB-CSIC, Catalonia, Spain)

LOCAL ORGANIZING COMMITTEE:

Jordi Arbiol ICREA & ICN2

María de la Mata ICN2

Miquel Royo ICMAB-CSIC Riccardo Rurali ICMAB-CSIC

Montse Salas ICMAB-CSIC – msalas@icmab.es

Additional information:

http://www.icmab.es/NANOWIRES2015

SCIENTIFIC PROGRAM

Monday 26th October 2015

12:00 – 14:00	REGISTRATION
14:00 – 14:15	OPENING CEREMONY Riccardo Rurali / Jordi Arbiol

NANOWIRE GROWTH WORKSHOP

NGW: Growth Evolution Session Chair: Lutz Geelhaar

14:15 – 14:45	VUT Brno, Czech Republic Germanium Nanowire Growth in Scanning Electron Microscope Invited
14:45 – 15:00	Michael A. Filler Georgia Institute of Technology, US Sub-Eutectic Vapour-Liquid-Solid Growth of Ge Nanowires Enabled by Sidewall Hydrogen
15:00 – 15:15	Vladimir Kaganer PDI, Germany Coalescence of spontaneously formed GaN nanowires in plasma-assisted molecular beam epitaxy
15:15 – 15:30	Philipp Schroth Universität Siegen & KIT, Germany Polytypism in growing self-catalyzed GaAs nanowires probed by time resolved in-situ high- resolution X-ray diffraction
15:30 – 15:45	Daniel Jacobsson Lund University, Sweden Real time imaging of growing GaAs nanowires under transient growth conditions

15:45 – 16:15 COFFEE BREAK & EXHIBITION (HALL)

NGW: Heterostructures

16:15 – 16:45	Moira Hocevar Institut Néel, France Si/III-V nanowire heterostructures Invited
16:45 – 17:00	Giacomo Priante CNRS-Laboratoire de Photonique et de Nanostructures, France GaP/GaAs Axial Heterostructures in Self-Catalyzed Nanowires
17:00 – 17:15	Valentina Zannier NEST, Italy Growth of GaAs/InAs and InAs/GaAs axial heterostructured nanowires by Chemical beam epitaxy
17:15 – 17:30	Edith Bellet-Amalric Univ. Grenoble Alpes & CNRS, Institut NEEL & CEA, INAC-SP2M, France Single-temperature growth of II-VI dots in core-shell nanowires
17:30 – 17:45	Diana Car TU/e, Netherlands Adding functionality: InSb nanowires with built-in tunnel barriers
17:45 – 18:00	Ryan B. Lewis PDI, Germany Elastic and plastic strain relaxation in GaAs/(In,Ga)As core-shell nanowire heterostructures

Session Chair: Erik Bakkers

Tuesday 27th October 2015

Session Chair: Michael Filler

Session Chair: Kimberly Dick

NGW: Basic Growth Mechanisms

9:00 – 09:30	Jianhua Zhao Chinese Academy of Sciences, China Molecular-beam epitaxy of high-quality InAs/InSb heterostructure nanowires on Si(111)
9:30 – 9:45	Luna Namazi Lund University, Sweden Direct Nucleation, Morphology and Compositional Tuning of InAs1- xSbx Nanowires on InAs (111) B Substrates
9:45 – 10:00	Yury Berdnikov St. Petersburg Academic University, Russia Regimes of self-catalysed nanowires growth
10:00 – 10:15	Emmanouil Dimakis Helmholtz-Zentrum Dresden-Rossendorf, Germany New possibilities in the self-catalyzed growth of GaAs nanowires using a modification of migration-enhanced epitaxy
10:15 – 10:30	Frank Glas CNRS - Laboratoire de Photonique et de Nanostructures, France Critical examination of the mononucleation hypothesis and joint modelling of the kinetics and statistics of self-catalyzed NW growth
10:30 – 11:15	COFFEE BREAK & EXHIBITION (HALL)

NGW: Advanced Structures

11:15 – 11:30	Robert Day Harvard University, US Plateau-Rayleigh Crystal Growth of Periodic Shells on Synthesized and Fabricated 1D Substrates
11:30 – 11:45	Lin Tian IMM-CNR, Italy Synthesis of Au- or In-seeded Si NWs on flexible organic substrates

11:45 – 12:00	Alexander Kelrich Technion, Israel Growth of InP nanoflags and planar nanowires by in situ catalyst manipulation
12:00 – 12:15	Bernhard Loitsch WSI, TU München, Germany Tunable quantum confinement in ultrathin GaAs based nanowires via reverse reaction growth
12:15 – 12:30	Torsten Rieger Peter Grünberg Institute, Forschungszentrum Jülich GmbH, Germany Self-assembled InAs nanowire junctions on Si substrates

12:30 – 14:30 LUNCH (included)

NGW: Selective Area Growth

14:30 – 14:45	Mattias Borg IBM Research – Zurich, Switzerland Template-Assisted Selective Epitaxy: Highly controlled III-V nanowire integration on Si
14:45 – 15:00	Jelena Vukaljovic EPFL, Switzerland InAs Growth in Si/SiO2 Nanotubes by Molecular Beam Epitaxy
15:00 – 15:15	Dingding Ren Norwegian University of Science and Technology (NTNU), Norway High-yield Self-catalyzed GaAsSb/GaAs Heterostructured Nanowire Array on Si(111) by Molecular Beam Epitaxy
15:15 – 15:30	Vladimir Dubrovskii Ioffe Physical technical Institute (RAS) & ITMO University, Russia Narrowing the radius distribution of Ga-catalyzed GaAs nanowires

Session Chair: Hadas Shtrikman

15:30 – 17:30	POSTER SESSION A (see page 11) & EXHIBITION (HALL)
----------------------	--

NGW: Polytypism Session Chair: Isabel Alonso

17:30 – 18:00	Evelyne Gil Institut Pascal, France VLS growth from chloride gaseous precursors: fast atomistic growth process for polytypism-free III-V NWs with record aspect ratio
18:00 – 18:15	Simone Assali TU/e, Netherlands Decoding crystal phase switching in nanowires
18:15 – 18:30	Sebastian Lehmann Lund University, Sweden Group V-flow induced zinc blende – wurtzite – zinc blende transition in Au-seeded GaAs nanowires grown by MOVPE

Wednesday 28th October 2015

Cross-Over Day: NGW+NW

NGW+NW: Photonics Session Chair: Riccardo Rurali

9:00 – 09:30	Maria Tchernycheva IEF-CNRS, France Nitride nanowire light emitting diodes: from single wire properties to flexible light emitters
9:30 – 9:45	Bruno Daudin Univ. Grenoble Alpes & CEA, INAC-SP2M, France Molecular beam epitaxy growth of InGaN/GaN nanowire heterostructures
9:45 – 10:00	Vilgailé Dagytè Lund University, Sweden Characterization of III-V nanowires towards the realisation of intermediate band solar cells
10:00 – 10:15	Subhajit Biswas Tyndall National Institute, University College Cork, Ireland Bottom-up grown direct bandgap Ge1-xSnx (x> 0.09) nanowires
10:15 – 10:30	Diana Huffaker UCLA, US Band gap blue-shift induced by Wurtzite crystal phase in InAsSb nanowires grown by selective-area MOCVD
10:30 – 11:00	COFFEE BREAK & EXHIBITION (HALL)

NGW+NW: Transport and Doping

11:00 – 11:30	Shixiong Zhang Indiana University, US Controlled growth and enhanced thermoelectric properties of topological crystalline insulator nanowires
11:30 – 11:45	Kris A. Bertness NIST, US Characterization of Mg Doping in GaN Nanowires with Raman Spectroscopy

Session Chair: Maria Tchernycheva

11:45 – 12:00	Silvia Rubini IOM-CNR, Italy Te doping for high electron densities in self-assisted GaAs nanowires
12:00 – 12:15	Jessica Boland University of Oxford, UK Terahertz Spectroscopy of Modulation Doped GaAs/AlGaAs Core-Shell Nanowires
12:15 – 12:30	Kilian Mergenthaler Lund University, Sweden Photon Upconversion and Charge Carrier Dynamics in Highly Doped InP Nanowires

12:30 – 14:30 LUNCH (included)

NGW+NW: Hetero & Homostructures, Polytypes

14:30 – 15:00	Paul C. McIntyre Stanford University Carrier Dynamics in Ge and Ge-Core/Si(Ge)-Shell Nanowires: Effects of Diameter, Growth and Surface Conditions	
15:00 – 15:15	Damien Salomon ESFR, France Probing Structural Defects and Chemical Heterogeneities in Nanowires with a Multimodal Hard X-Ray Nanoprobe	
15:15 – 15:30	Qiandong Zhuang Lancaster University, UK InAsSb nanowires grown by molecular beam epitaxy for long wavelength infrared optoelectronics	

Session Chair: Faustino Martelli

15:30 – 17:30 POSTER SESSION B (see page 15) & EXHIBITION (HALL)

17:30 – 17:45	Reza Zamani Lund University, Sweden Structure Study of III-V heterostructured Nanowires: Polarity and Interfaces
17:45 – 18:00	María de la Mata Institut Català de Nanociència i Nanotecnologia, ICN2, CAT, Spain III-V Nanowires: an Atomic Resolution Approach
18:00 – 18:30	Katsumi Kishino Sophia University, Japan Selective area growth of GaN nanocolumns for application to visible nanocolumn emitters

Thursday 29th October 2015

Session Chair: Jordi Arbiol

Session Chair: Martin Eickhoff

NW: Quantum Structures and Functionality (I)

9:00 – 09:30	Martin Eickhoff Justus-Liebig-Universität Gießen, Germany Group III-nitride nanowire hetero- and quantum structures	Invited
9:30 – 09:45	Nicolas Chauvin INSA-Lyon, France Optical anisotropy in single InAs/InP quantum dot and quantum rod nanowires	
9:45 – 10:00	Davide Cadeddu University of Basel, Switzerland A Quantum Fiber-Pigtail	
10:00 – 10:30	Eva Monroy CEA, France Interband and intersubband transitions in GaN/AIN nanowire heterostructures	Invited
10:30 – 11:00	COFFEE BREAK & EXHIBITION (HALL)	

NW: Quantum Structures and Functionality (II)

Ritesh Agarwal Invited UPenn, US 11:00 - 11:30 Novel classical and quantum photonic devices by manipulating light-matter interactions in lowdimensional systems **Dick Van Dam** 11:30 - 11:45 TU/e, Netherlands Directional and polarized nanowire emission governed by waveguide modes **Malin Nilsson** 11:45 - 12:00 Lund University, Sweden Single-electron tunnelling in InAs nanowire quantum dots formed by crystal phase engineering Invited **Martin Strassburg** Osram Opto Semiconductors, Germany 12:00 - 12:30 High-aspect ratio core-shell InGaN/GaN microrods for future high-efficiency lighting

LUNCH (included)

NW: Advanced Optoelectronics

14:30 – 15:00	Pierre Corfdir PDI, Germany Dielectric confinement of excitons in ultrathin GaN nanowires
15:00 – 15:15	Nicklas Anttu Lund University, Sweden Nanophotonics in III-V nanowire arrays
15:15 – 15:30	Benedikt Mayer WSI, Germany Ramsey fringes and ultrafast coherent pulse emission from GaAs-AlGaAs nanowire lasers
15:30 – 17:30	DOCTED SESSION ((see page 10) & EVHIDITION (HALL)
13.30 - 17.30	POSTER SESSION C (see page 19) & EXHIBITION (HALL)
17:30 – 18:00	Martino Poggio Basel University, Switzerland Sensing with Nanowires
18:00 – 18:15	Jos E.M. Haverkort TU/e, Netherlands Digital emission tuning in GaP crystal phase quantum wells
18:15 – 18:30	Lars Samuelson Lund University, Sweden Nanowire-based Tandem Solar Cells

Session Chair: Anna Fontcuberta

Friday 30th October 2015

NW: Transport, Thermoelectronics and Novel Devices Session Chair: Riccardo Rurali

9:00 – 9:30	Jose Ordonez Ecole Centrale Paris, France Heat Transport in Nanowires Supporting the Propagation of Polaritons and Phonons
9:30 – 9:45	Adam Burke Lund University, Sweden Nonlinear thermoelectric response due to energy-dependent transport properties of a quantum dot
9:45 – 10:00	Xavier Cartoixà Soler Universitat Autònoma de Barcelona, CAT, Spain Thermal rectification by design in telescopic Si nanowires
10:00 – 10:15	Thomas Sand Jespersen Niels Bohr Institutet, Denmark Transport in Epitaxial Semiconductor/superconductor nanowire hybrid quantum dots
10:15 – 10:30	Neophytos Neophytou The University of Warwick, UK Thermoelectric properties of gated Si nanowires
10:30 – 11:00	COFFEE BREAK & EXHIBITION (HALL)

NW: Nanophotonics and Quantum Physics

11:00 – 11:30	Masaya Notomi NTT, Japan Hybrid nanophotonics systems based on sub-wavelength nanowires
11:30 – 11:45	Alois Lugstein TU Wien, Austria Hot electroluminescence in Si nanowires

Session Chair: Xavier Cartoixà

11:45 – 12:00	Marta de Luca Sapienza Università di Roma, Italy Nanowires Are Not So Cool
12:00 – 12:15	Jaime Gómez-Rivas FOM Institute AMOLF, Netherlands Nanowire Antenna Absorption Probed with Time-Reversed Fourier Microscopy
12:15 – 12:30	Martin Leijnse Lund University, Sweden Quantum transport in core-shell nanowires
12:30 – 12:45	Hao Zhang TU Delft, Netherlands Experimental Progress on Majorana Fermions in Semiconductor Nanowire Devices

12:45 – 13:00 CLOSURE



BARCELONA 2015

POSTER SESSIONS

POSTER SESSION – A

Tuesday 27th October 2015

Nanowire Growth Workshop

15:30 – 17:30	POSTER SESSION A NGW
NGW1	Samik Mukherjee Polytechnique Montréal, Canada Dynamics of the Nanowire VLS Growth Unravelled by Isotope Tracing
NGW2	Tomáš Pejchal Brno University of Technology, Czech Republic The Role of Hydrogen in Ge Nanowire Growth
NGW3	Mariam Fakhfakh Institut d'Electronique Fondamentale, CNRS-UMR, France Characterization of Ge nanowires under Mn implantation
NGW4	Jessica Doherty University College Cork, Ireland Induction of Twinning and Polytypes in Diameter Controlled Germanium Nanowires
NGW5	Nicolas Hibst Ulm University, Germany Exploring the Growth Regimes of Platinum Catalyzed Silicon Nanowire Growth
NGW6	Jessica Bolinsson University of Copenhagen, Denmark Silver as a catalyst for growth of GaAs nanowires
NGW7	Rong Su Lund University, Sweden Effect of V-III ratio on low-temperature growth Sn-seeded GaAs nanowire
NGW8	Zhenning Dong Clermont Université, Clermont-Ferrand, France Ga-Catalyst GaAs Nanowires grown on Silicon by HVPE
NGW9	Teemu Hakkarainen Tampere University of Technology, Finland Self-induced growth of GaAs nanowires on lithography-free Si/SiO _x patterns
NGW10	Julian Jakob Karlsruhe Institute of Technology, Germany Tailoring of GaAs NW for in-situ X-ray investigations using a portable MBE

NGW11	Seyed Mohammad Mostafavi Kashani University of Siegen & Karlsruhe Institute of Technology, Germany Thermal annealing of GaAs nanowires studied by in-situ time-resolved x-ray diffraction
NGW12	Alexander A. Koriakin St. Petersburg Academic University and ITMO University, Russia Modeling of GaAs nanowire formation via selective-area MOCVD
NGW13	Jurij Grecenkov St. Petersburg Academic University, Russia Modelling of the growth Au-catalysed of InGaAs nanowires: interplay of group III elements and the role of group V
NGW14	Nikolai V. Sibirev St. Petersburg Academic University, Russia Step propagation and the shape of nanowires
NGW15	Masoomeh Ghasemi Lund University, Sweden Studying the phase stability of the nanoscale InSb systems
NGW16	Marcus Tornberg Lund University, Sweden Homoepitaxial growth of Sn-seeded antimonide-based nanowires by MOVPE
NGW17	Ezekiel A. Anyebe Lancaster University, United Kingdom Arsenic flux - induced suppression of lateral growth in InAsSb nanowires grown on Graphite
NGW18	Hayfaa Alradhi Lancaster University, United Kingdom Realization of InAs/AISb core-shell NWs grown by MBE
NGW19	Heidi Potts EPFL, Switzerland Growth and characterization of twin-free InAs _{1-x} Sb _x nanowires
NGW20	Thomas Kanne University of Copenhagen, Denmark InAs _{1-x} Sb _x / Al core-shell nanowire epitaxy
NGW21	Saša Gazibegović TU Delft and TU Eindhoven, Netherlands Epitaxial Growth of Aluminum on InSb Nanowires
NGW22	Jung-Hyun Kang Weizmann Inst., Israel In-situ MBE Al Coated Thin InAs Nanowires and Merged Intersections

NGW23	Caroline Lindberg University of Copenhagen, Denmark Exploring growth of silver catalysed InAs nanowires
NGW24	Daniele Ercolani Scuola Normale Superiore and Istituto di Nanoscienze-CNR, Pisa, Italy Nucleation mechanisms and growth kinetics of Catalyst-free InAs nanowires grown on Si (111)
NGW25	Mitchell T. Robson McMaster University, Hamilton, Canada Growth modes of InAs nanowires on Si(111) substrates
NGW26	Nataliya Shwartz Institute of Semiconductor Physics, Novosibirsk, Russia Simulation of self-catalyzed InAs and GaAs nanowire growth
NGW27	Jan Schmidtbauer Lund University, Sweden, and Leibniz Institute for Crystal Growth, Berlin, Germany Mechanisms leading to broadened length distributions of nanowires
NGW28	Lucia Sorba Scuola Normale Superiore and Istituto di Nanoscienze-CNR, Pisa, Italy Diameter distribution of InAs nanowires grown by Au-assisted methods
NGW29	Guoqiang Zhang NTT Basic Research Laboratories, Japan Atomically-abrupt interface by stacking fault engineering
NGW30	Marta Sobanska Polish Academy of Sciences, Warsaw, Poland Kinetics of spontaneous nucleation and PAMBE growth of GaN nanowires on amorphous Al _x O _y studied by RHEED
NGW31	Vishnuvarthan Kumaresan CNRS - Laboratoire de Photonique et de Nanostructures, France New Templates for Self-induced Growth of Vertical GaN Nanowires
NGW32	Saskia Weiszer WSI, TU München, Germany MBE growth and characterization of InGaN nanowires on Si (111)
NGW33	Tandra Ghoshal University College Cork & CRANN/AMBER, Trinity College Dublin, Ireland Large scale in-plane Si nanowire arrays on Si substrate: An insitu hard mask block copolymer approach
NGW34	Jelena Vukajlović Pleština EPFL, Switzerland Modification of the surface properties for achieving high yield GaAs nanowire arrays on silicon
NGW35	Siew Li Tan CEA/CNRS/UJF Joint Team "Nanophysics and Semiconductors", Grenoble, France Selectivity and yield improvement in selectively grown GaAs nanowires on Si

NGW36	Danial Bahrami Universität Siegen, Germany Focused Ion Beam Pre-Patterning of Si substrates for the growth of GaAs nanowires
NGW37	Aiyeshah Alhodaib Lancaster University, UK Catalyst-free selective area MBE of semiconductors nanowires on a Si pattern substrate
NGW38	Joona-Pekko Kakko Aalto University, Finland Fabrication of Dual-Type Nanowire Arrays
NGW39	Gozde Tutuncuoglu EPFL, Switzerland Heterostructures based on GaAs nanoscale membranes
NGW40	Kaddour Lekhal Nagoya University, Japan Compatibility of hydride vapor phase epitaxy process with synthesis of horizontal and vertical GaN nanowires
NGW41	Maryam Khalilian Lund University, Sweden Control of dislocations in GaN nanowires
NGW42	Blandine Alloing CRHEA-CNRS, Valbonne, France Dislocation-filtering and polarity in the selective area growth of GaN nanowires by continuous-flow MOVPE

POSTER SESSION – B

Cross-Over Day: NGW+NW

Wednesday 28th October 2015

15:30 – 17:30	POSTER SESSION B NGW-NW (Cross-Over Day)	
NGWxNW1	Jian Tang LPICM-CNRS, France Composition and crystallinity characterization of tin-catalyzed Si _{1-x} Ge _x nanowires grown by plasma assisted vapor-liquid-solid	
NGWxNW2	Christopher Davies University of Oxford, UK High Ensemble Uniformity and Low Disorders in Quantum Well Tube Nanowires Probed by Photoluminescence Spectroscopy	
NGWxNW3	Michele Amato IEF, France Shell-Thickness Controlled Semiconductor-Metal Transition in Si-SiC Core-Shell Nanowires	
NGWxNW4	Doriane Djomani Université Paris-Sud, France Strain-induced phase transformation in Ge nanowires	
NGWxNW5	Luca Boarino INRiM, Italy Ordered Silicon Nanowires by Metal Assisted Chemical Etching	
NGWXNW6	Isabel Alonso ICMAB-CSIC, CAT, Spain Micro-Raman spectroscopy and imaging of epitaxial SiGe nanowires grown on Si(001)	
NGWxNW7	Rianne Plantenga TU Eindhoven, Netherlands Hexagonal GaP-Si-SiGe core-multishell nanowires studied by Atom Probe Tomography	
NGWxNW8	Valentina Zannier Scuola Normale Superiore and Istituto di Nanoscienze-CNR, Pisa, Italy Optical properties of single wurtzite/zinc-blende ZnSe nanowires grown at low temperature	
NGWxNW9	Arman Davtyan University of Siegen, Germany Randomly distributed phase domains in single GaAs NWs	
NGWxNW10	Zbigniew R. Zytkiewicz Polish Academy of Sciences, Warsaw, Poland Influence of growth conditions on optical properties of GaN nanowires grown by PAMBE on amorphous Al _x O _y	

NGWxNW11	Bruno Daudin Univ. Grenoble Alpes, CEA, INAC-SP2M, and CNRS, France High Si incorporation in MBE-grown GaN nanowires				
NGWxNW12	Matthew D. Brubaker NIST, US Selective area growth and surface recombination velocity measurements in N-polar gallium nitride nanowire arrays				
NGWxNW13	Martin Hetzl WSI, TU München, Germany Growth and electrical transport properties of GaN nanowire/diamond heterojunctions				
NGWxNW14	Matthias Belloeil CEA Grenoble, France Growth, structural and optical characterizations of AlGaN/GaN nanowire heterostructures				
NGWxNW15	Jonas Lähnemann INAC CEA Grenoble, France UV photodetector based on single GaN/AIN nanowire heterostructures				
NGWxNW16	Yuta Konno Sophia University, Japan InGaN/GaN p-i-n nanocolumns grown on SiO₂/Si (100) substrates employing AlN/graphene				
NGWxNW17	Claudia Speich Univ. Duisburg-Essen, Germany MOVPE grown axial n-GaN/p-GaAs nanowires				
NGWxNW18	Daria Beznasyuk Institut Néel - CNRS, France Towards axial Si/GaAs nanowire heterostructures				
NGWxNW19	Suzanne Lancaster TU Wien, Austria Zn dopant incorporation via contact annealing of GaAs nanowires				
NGWxNW20	Amaury Mavel Université de Lyon and INSA Lyon, France Quantum confinement effect in InAs/InP quantum dot nanowires (QD-NWs) grown on silicon-				
NGWxNW21	Jonathan Becker WSI, TU München, Germany Correlation of microstructure and electrical transport characteristics in InAs Nanowires				
NGWxNW22	Alessandro Cavalli TU Eindhoven, Netherlands Growth of Selective-Area MOVPE In(Ga)P Nanowires				

NGWxNW23	Diana Huffaker UCLA, US Dead-space effect in InGaAs nanopillar avalanche photodetectors				
NGWxNW24	Julian Treu WSI, TU München, Germany Widely tunable InGaAs nanowire heterostructures and devices				
NGWxNW25	Maximilian Speckbacher WSI, TU München, Germany Optical investigation of surface Fermi level-pinning in high periodicity InGaAs nanowire arrays				
NGWxNW26	Xulu Zeng Lund University, Sweden Growth and doping evaluation of p-type GalnP nanowires				
NGWxNW27	Vishal Jain Lund University, Sweden Design and realization of InP/InAsP nanowire-based avalanche photodetectors				
NGWxNW28	Luca Gagliano TU Eindhoven, Netherlands Pure Wurtzite GaP/InGaP core-multishell quantum well nanowires for Solid State Lighting				
NGWxNW29	Johannes Greil TU Eindhoven, Netherlands Effects of uniaxial strain on the PL emission spectrum of WZ GaP nanowires				
NGWxNW30	Rawa Tanta NBI, Copenhagen Univ., Denmark Surface-dependent oxidation of branched InAs nanowires				
NGWxNW31	Sebastien Plissard CNRS, LAAS, and Univ de Toulouse, France Formation and optical properties of GaAsSb nanowire networks				
NGWxNW32	Junghwan Huh Norwegian University of Science and Technology, Trondheim, Norway Photocurrent Mapping of Single GaAsSb Nanowire Diodes				
NGWxNW33	Veer Dhaka Aalto University, Finland Protective capping and surface passivation of III-V nanowires by ALD				
NGWxNW34	Tuomas Haggrén Aalto University, Finland Efficient and simple surface passivation method for GaAs nanowires				
NGWxNW35	Mukesh Kumar Indian Institute of Technology Delhi, India Coaxial GaN/Ga ₂ O ₃ heterostructure nanowires formed via ammonification process				

NGWxNW36	Linus Krieg TU Braunschweig, Germany Conformal growth of ultra-thin p-conductive polymer shells on n-type semiconductor nanowires by oxidative chemical vapour deposition				
NGWxNW37	Sonia Conesa-Boj TU Delft, Netherlands Towards defect-free hexagonal Si from suppression of crack defect formation				
NGWxNW38	Aloyzas Šiušys Polish Academy of Sciences, Warsaw, Poland Magnetic and structural properties of MBE grown wurtzite (Ga,Mn)As shells in a radial quantum well nanowire heterostructures				
NGWxNW39	Ali Hassan Univ. of Siegen, Germany Elastic strain relaxation in GaAs/InGaAs/GaAs core-shell NW heterostructures grown by MBE on Si (111)				
NGWxNW40	Jessica Boland Oxford Univ., UK High Ensemble Uniformity and Low Disorders in Quantum Well Tube Nanowires Probed by Photoluminescence Spectroscopy				
NGWxNW41	Llorenç Servera Serapio EUSS, CAT, Spain Process of manufacturing of a carbonaceous material for supercapacitors applications				
NGWxNW42	Oscar Kennedy University College London, UK Surface luminescence in ZnO nanowires				

POSTER SESSION – C

Thursday 29th October 2015

Nanowires Workshop

15:30 – 17:30	POSTER SESSION C NW				
NW1	Thomas Stettner WSI, TU München, Germany Monolithically integrated core-shell GaAs-AlGaAs NW lasers on Si				
NW2	Jonas Vogel Siegen Univ., Germany Investigation of single objects in GaAs Nanowire ensemble measurements by x-ray diffraction				
NW3	Julia Winnerl WSI, TU München, Germany OD quantum emitters in ultrathin GaAs nanowires				
NW4	Lorenzo di Mario IMM-CNR, Italy Study of the Schottky barrier on single GaAs nanowires by X-ray PhotoEmission Electron Microscopy				
NW5	Luca Francaviglia EPFL, Switzerland Shell quantum dots in core-shell GaAs-AlGaAs nanowires studied by photoluminescence and cathodoluminescence				
NW6	Dmitry Mikulik EPFL, Switzerland Towards flexible GaAs nanowire-based solar cells				
NW7	Eleonora Frau EPFL, Switzerland Photocatalytic water splitting with GaAs nanowires				
NW8	Patrick Zellekens Forschungszentrum Jülich, Germany Angle dependent magnetoconductance oscillations and Hall measurements in GaAs/InAs Core/Shell Nanowires				
NW9	Xiaomo Xu WSI, TU München, Germany Selective-area epitaxial grown In1-xGaxAs nanowires using novel UV-cured nano-imprint lithography				
NW10	Floris Braakman Basel Univ., Switzerland Nonlinear mechanical mode coupling and quantum dots in grown GaAs nanowire				

NW11	I-Ju Chen Lund Univ., Sweden Electrical studies of controlled crystal polytypes in InAs nanowires for thermoelectric applications				
NW12	Esther Alarcón Lladó EPFL, Switzerland IV and III-V nanowires for efficienct sunlight harvesting and conversion into fuel				
NW13	Francesca Amaduzzi EPFL, Switzerland Non-contact free carrier probing induced by photonic modes in suspended nanowires				
NW14	Sven Dickheuer Forschungszentrum Jülich, Germany Hybrid Devices — Transport measurements on GaAs/InAs core/shell nanowires with superconducting contacts				
NW15	Robert Ukropec Forschungszentrum Jülich, Germany Scattering infrared near-field optical investigations of local free charge carrier concentrations in contacted InAs nanowires				
NW16	Enrique Montes Muñoz KAUST, Saudi Arabia Tunneling magnetoresistance in silicon nanowires				
NW17	Brieux Durand LAAS-CNRS, France Highly sensitive 3D silicon nanowire sensors for ppb levels detection of NO₂				
NW18	Naoki Fukata NIMS, Japan Hybrid solar cells using nanocrystalline Si quantum dots and Si nanowires				
NW19	Jonas Lähnemann INAC CEA Grenoble, France Radial Stark effect in (In,Ga)N nanowires				
NW20	Angelina Vogt T.U. Braunschweig, Germany Luminescence dynamics of core-shell InGaN/GaN micro- and nanowire LED structures				
NW21	Núria Garro Univ. València, Spain Polarity studies of GaN nanowires by scanning probe microscopy				
NW22	Nicolas Jamond LPN-CNRS, France GaN nanowires based piezogenerator				

NW23	Mattia Musolino PDI, Germany In-depth physical description of the current conduction in light emitting diodes based on (In,Ga)N/GaN nanowire ensembles				
NW24	Mahtab Aghaeipour Lund Univ., Sweden Tunable optical absorption resonances in wurtzite and zinc blende GaP nanowire arrays				
NW25	Ning Kang Weizmann Institute of Science, Israel Coherent Single Charge Transport in MBE-Grown InSb Nanowire				
NW26	Antonio Polimeni Sapienza Univ. di Roma, Italy Polarized Light Absorption in Wurtzite InP Nanowires				
NW27	Wei Zhang Lund Univ., Sweden Carrier Recombination Dynamics in Sulfur Doped InP Nanowires				
NW28	Dick Van Dam TU/e, Netherlands Improved Fermi-level splitting enables InP nanowire solar cell with 19% efficiency				
NW29	Mohammad Ramezani TU/e, Netherlands Hybrid Semiconductor Nanowire—Metallic Yagi-Uda Antennas				
NW30	Miquel Royo Univ. Jaume I, Spain Aharonov-Bohm oscillations and electron gas transitions in hexagonal core-shell nanowires with an axial magnetic field				
NW31	Patrick Parkinson Manchester Univ. UK Nanowire Photoconductive Detectors for Terahertz Time-Domain Spectroscopy				
NW32	Robert Röder Jena Univ., Germany Ultrafast dynamics of lasing semiconductor nanowires				
NW33	Pierre-Adrien Mante Lund Univ., Sweden Non-destructive mechanical and optical characterization of semiconductor nanowires				
NW34	Haim Beidenkopf Weizmann Institute of Science, Israel Local Spectroscopy of One-Dimensional Electronic States in Semi-Conducting Nanowires				
NW35	Adrien Casanova LAAS-CNRS, France Development of nanowires based-devices for intra-cellular recording				

NW36	Yang Chen Lund Univ., Sweden Shockley-Queisser efficiency of a nanowire array tandem solar cell with axial junctions				
NW37	Salim Berrada IM2NP-CNRS, France The Impact of Lead Geometry and Discrete Doping on NWFET Operation				
NW38	Antonio Martínez Swansea Univ., UK DFT/NEGF study of discrete dopant in a Ultrascale Si FinFET				
NW39	Antonio Martínez Swansea Univ., UK Study of mobility in Si, GaAs and InGaAs NWFETs using the NEGF formalism				
NW40	Matthieu Jeannin Institut NÉEL-CNRS, France Light hole exciton emission from a single CdMnTe/ZnTe nanowire quantum dot evidenced by polarization-far field measurements				
NW41	Bernhard Loitsch WSI, TU München, Germany Electro-optical analysis of modulation-doped GaAs-AlGaAs core-shell nanowires				
NW42	Aiyeshah Alhodaib Lancaster University, UK Catalyst-free selective area MBE of semiconductors nanowires on a Si pattern substrate				

SPONSORED BY:







