

Workshop
"Fundamental research – New Materials"
Organized by the EU COST Action OPERA
Madrid, April 19-21, 2023

April 19, 2023

12h00	Registration
14h00	Welcome & Workshop opening
14h30	<i>S1.01 - M. Milanović - Invited Speaker</i> Polymer assisted deposition technique: a chemical solution route to high quality LaMnO ₃ thin films
15h00	<i>S1.02 - R. Butkutė</i> - Complex study of processes in Ga(As,Bi)/(Al,Ga)As quantum structures Initiated by in-situ MBE annealing
15h15	<i>S1.03 - A. Mahmoudi</i> - Electronic band structure of CVD-grown two-dimensional rhombohedral
15h30	<i>S1.04 - F. Hensling</i> - Homoepitaxial growth of c-plane sapphire of unmatched quality by thermal laser epitaxy
15h45	<i>S1.05 - C. Chirila</i> - Hafnia based epitaxial nanolaminates
16h00	Coffee Break
16h45	<i>S2.01 - P. Żabiński</i> - The role of epitaxial layer of oxides on surface of hydrogen evolution electrocatalyst
17h00	<i>S2.02 - S. Kret</i> - TEM analysis of semi-coherent epitaxial shells of semiconductor nanowires grown by MBE
17h15	<i>S2.03 - N. Shepelin</i> - Insights into the growth of coherent Ag(Nb,Ta)O ₃ thin films
17h30	<i>S2.04 - M. Toda i Casaban</i> - Epitaxial growth of perovskite manganite thin films by polymer assisted deposition for spintronic applications
17h45	<i>S2.05 - P. Dziawa</i> - MBE grown GaAs-Pb(1-x)Sn(x)Te Core-Shell Nanowires
18h00	<i>S2.06 - D. Y. Kim</i> - Growth of Oxide and Nitride Thin Films by Thermal Laser Epitaxy
18h15	<i>S2.07 - S. Stanionytė</i> - MBE growth and structural characterization of thin bismuth layers

April 20, 2023

8h00	Registration
8h30	S3.01 - E. Dudutienė - Growth and optical properties of GaAsBi quantum wells with parabolic AlGaAs barriers
8h45	S3.02 - J. Sadowski - TaAs Weyl semimetal thin films grown by molecular beam epitaxy
9h00	S3.03 - J. P. B. Silva - Ferroelectricity in epitaxial ZrO ₂ thin films
9h15	S3.04 - E. Işık - Electrical Characterization of Fullerene (C ₇₀) - TiO ₂ Nanotubes Heterostructure
9h30	S3.05 - S. Chen - Microstructure and Magnetization Dynamics in La ₂ /3Sr ₁ /3MnO ₃ Epitaxial Thin Films
9h45	S3.06 - L. Pellegrino - Pulsed laser deposition of LaAlO ₃ films for MEMS applications
10h00	S3.07 - H. Şahin - Experimental and Theoretical Investigation of the Usability of Graphene-like 2D Crystals in Chemical Sensor Applications
10h15	Coffee Break
11h00	S4.01 - Vesselin Tonchev - <i>Invited Speaker</i> The Pimpinelli Tonchev Videcoq Vladimirova (PTVV) theory: 21 years after
11h30	S4.02 - J-N. Aqua - Growth mechanisms of 2D materials: the Kinetic Monte-Carlo point of view
11h45	S4.03 - V. Deibuk - Phase Stability of Thermoelectric ZnSb-SnTe Thin Films
12h00	S4.04 - J. Johansson - Understanding Kinking of Semiconductor Nanowires
12h15	S4.05 - C. Cornet - Wetting properties of heteroepitaxial systems determined from surface and interface energies calculations
12h30	Lunch
14h00	S5.01 - C. Barbot - Selective Area Growth of in-plane In _{0.5} Ga _{0.5} P nanowires on GaAs(111)B substrate by molecular beam epitaxy
14h15	S5.02 - M. Alonso - MBE growth of Si-based nanocrystal pyramids on pit-patterned Si(001)
14h30	S5.03 - A. Kaleta - MBE-grown nanowires with wurtzite GaAs cores and ferromagnetic shells investigated by scanning transmission electron microscopy
14h45	S5.04 - E. Butanovs - Growth of few-layer van der Waals materials on semiconductor nanowires
15h00	S5.05 - S. KANG - Growth and NMR study of high quality ordered Mn ₅ (Six Ge _{1-x}) ₃ thin films on Ge(111) substrate
15h15	S5.06 - N. Chapuis - Key parameters for GaP(111)B surface preparation and Selenium passivation
15h30 - 18h00	Coffee Break & Poster session

April 21, 2023

8h00	Registration
8h30	<i>S6.01 - S. Calcaterra</i> - Germanium Quantum Wells for Spin Qubit Applications
8h45	<i>S6.02 - R. Vilarinho</i> - Electric-field engineered lattice distortions for optoelectronic devices
9h00	<i>S6.03 - Q. Hochart</i> - Combining Molecular Beam Epitaxy and Metal-Organic Chemical Vapor Deposition for GaInAsP-based Ultra-Wide Band Semiconductor Optical Amplifiers for device's performance optimization
9h15	<i>S6.04 - D. Dimitrov</i> - Study on the epitaxial growth of WSe ₂ on PtSe ₂ sublayer
9h30	<i>S6.05 - T. Malinauskas</i> - Remote Epitaxy of GaN via Graphene on GaN/Sapphire Templates
9h45	<i>S6.06 - M. Kolibal - Invited Speaker</i>
10h00	In-situ microscopy: Phase transformations during phosphorene formation on Cu(111)
10h15	Coffee Break
11h00	<i>S7.01 - M. Melo Nogueira Rosa Gomes</i> - The role of structural distortions in triggering the metal to insulator transition in NdNiO ₃
11h15	<i>S7.02 - L. Vincent</i> - Epitaxy of hexagonal Ge-2H: growth regimes and related I3 defects
11h30	<i>S7.03 - G. Bell</i> - Molecular Beam Epitaxial Growth of SrMnSb ₂ Thin Films
11h45	<i>S7.04 - T. Musálek</i> - Congruent evaporation of CsPbBr ₃ perovskite studied by Knudsen Evaporation Mass Spectroscopy
12h00	End - few words
12h15	
14h00 - 15h30	Lab Tour

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