

Tuesday June 04, 2024

08:00-08:45	Registration
08:45-09:00	Opening Ceremony
09:00-09:30 KEYNOTE	Giuseppe Battaglia (IBEC, Spain) Membrane modulating nanomedicine: a new approach to drug design
09:30-09:45 ORAL	Aranzazu Villasante (Institute for Bioengineering of Catalonia, Spain) Bridging Innovations in Nanoparticle- based Hyperthermia: From 3D- Engineered Tumor Models to Extracellular Vesicles-Coated Nanoparticles
09:45-10:00 ORAL	Nikola Knežević (BioSense Institute, Serbia) Potential of MRI-based sensing of cargo release from mesoporous silica for tracking drug delivery capabilities
10:00-10:15 ORAL	Anton Ficai (National University of Science and Technology POLITEHNICA Bucharest, Romania) Smart Drug Delivery Systems for Treatment of Tissue-Associated Diseases
10:15-10:30 ORAL	Manuel Azocar (Universida de Santiago de Chile, Chile) Stabilized silver nanoparticles with carboxylate groups: effect of stabilization, generation of reactive oxygen species (ROS) and antibacterial activity
10:30-11:30	Coffee Break / Poster Session / Exhibition
11:30-11:45 ORAL	Alberto Martín-Pérez (Politecnico di Torino, Italy) Multiplexed cell sensing using a hybrid microfluidic, nanomechanical and dielectrophoretic device
11:45-12:00 ORAL	Eduardo Gil Santos (Institute of Micro and Nanotechnology (IMN-CNM, CSIC, Spain) Nano optomechanical disk sensors
12:00-12:15 ORAL	Gennady Panin (Institute of Microelectronics Technology and High-Purity Materials, Russian Academy of Sciences, Russia) Bioinspired Photomemristive Sensors Based on Graphene and 2D Materials
12:15-14:00	Cocktail Lunch (offered by Nanospain2024 organisers)
14:00-14:30	Poster Session I
14:30-15:00 KEYNOTE	Maria Concepción Serrano (ICMM-CSIC, Spain) Nanomaterials for neural therapeutics
15:00-15:15 ORAL	Antonio Topete (University of Santiago de Compostela, Spain) Nanoparticle-based dosed photo-thermal therapy with hollow Au/Ag nanoshells amplifies immunogenicity and NK cell cytotoxicity against triple negative breast cancer cells in vitro
15:15-15:30 ORAL	Alberto Pardo Montero (University of Santiago de Compostela, Spain) Use of Advanced 3D Bioprinting Technologies for the Engineering of Tendon-Biomimetic Magnetic Nanocomposites
15:30-16:00 KEYNOTE	Sergio Moya (CIC BiomaGUNE, Spain) Translocation and Biological Fate of Protein corona: A dynamic study
16:00-16:30 KEYNOTE	Danny Porath (The Hebrew University of Jerusalem, Israel) Molecular Electronics with DNA towards DNA Detection
16:30-17:30	Coffee Break / Poster Session / Exhibition

Wednesday June 05, 2024

09:00-09:30 KEYNOTE	Jose Aleman Lara (UAM, Spain) Crafting Nano Architectures for Photocatalytic Pathways in Organic Synthesis
09:30-09:45 ORAL	Andrea Inclan Acevedo (Institut Català de Nanociència i Nanotecnologia (ICN2), Spain) Synthesis and characterization of hybrid materials based on Keggin Polyoxometalate fixed on carbon as oxygen reduction reaction electrocatalysts in near neutral aqueous media
09:45-10:00 ORAL	Martín Dieste (Universidad de Santiago de Compostela, Spain) CO ₂ valorization: A new alternative catalysis with Ag and Cu Metal Molecules
10:00-10:15 ORAL	María Moreno Pérez (Universidade de Santiago de Compostela, Spain) Silver clusters-TiO ₂ hybrid nanomaterials as photocatalyst for degradation of emerging pollutants
10:15-10:45 KEYNOTE	Jan M. Macak (Brno University of Technology, Czech Republic) Atomic Layer Deposition of Noble Metal Nanoparticles for Electrocatalytic Applications
10:45-11:15	Coffee Break / Poster Session / Exhibition
11:15-11:30 ORAL	Lluís Marsal (Universitat Rovira i Virgili, Spain) Netpore: COST network on porous semiconductors and oxides
11:30-11:45 ORAL	Kari Koski (Beneq Oy, Finland) Conformal Nanostructure Coatings by Atomic Layer Deposition
11:45-12:00 ORAL	Robert Christopher Burns (The Porous Silicon Company, Austria) Title TBD
12:00-12:20 INVITED	Wenhui Niu (Max Planck Institute of Microstructure Physics, Germany) Advances in Precision Graphene Nanoribbons
12:20-12:50 KEYNOTE	Vincenzo Palermo (CNR-ISOF, Italy) Graphene oxide-Glia interfaces for the selective modulation of brain signalling
12:50-13:20 KEYNOTE	Stephan Roche (ICREA / ICN2, Spain) What are amorphous 2D Materials good for?
13:20-13:50 KEYNOTE	Andrea Ferrari (Cambridge Graphene Centre / University of Cambridge, UK) Title TBD
13:50-15:30	Lunch
15:30-16:00 KEYNOTE	Sascha Sadewasser (INL, Portugal) From the surface into the bulk: Scanning probe microscopy on Cu(In,Ga)Se ₂ solar cells
16:00-16:15 ORAL	Ricardo Adolfo Medina Echavarría (Universidad de Manizales, Colombia) Design of a solar cell based on computational simulations of InAlN semiconductor nanostructures
16:15-16:45 KEYNOTE	Sonia Ruiz Raga (ICN2, Spain) The Operational Stability of Perovskite Solar Cells: Revealing its degradation mechanisms by in-situ studies and strategies for stability enhancement
16:45-17:15	Coffee Break / Poster Session / Exhibition
17:15-17:30 ORAL	Osbel Almora (Universitat Rovira i Virgili, Spain) Instability Analysis of Perovskite Solar Cells via Drift-diffusion Numerical Simulation of Impedance Spectroscopy at Short-circuit
17:30-17:50 INVITED	María Cruz López Escalante (University of Malaga, Spain) Nanotechnology applied to solar energy devices
17:50-18:10 INVITED	Jennifer Teixeira (INL, Portugal) Implementing Nanofabricated Architectures in Cu(In,Ga)Se ₂ Ultrathin Solar Cells
18:10-18:30 INVITED	Eugenia Martínez (ICIQ, Spain) Molecular tuning in self-assembled molecules for applications as selective contacts in optoelectronic devices
20:30	Conference Dinner

Thursday June 06, 2024

09:00-09:15 ORAL	Elisabet Xifre-Perez (Universitat Rovira i Virgili, Spain) High-amplification SERS platforms based on nanopatterned aluminium for molecular detection
09:15-09:30 ORAL	Luca Guerrini (Universitat Rovira i Virgili, Spain) Extending the range of metal ions SERS detection using hybrid plasmonic/ZIF-8 particles
09:30-09:45 ORAL	Gunther Van Kerckhove (OCSiAl, Luxembourg) Raman spectroscopy elucidates the transformation of single-walled carbon nanotubes following abrasive wear of epoxy coatings
09:45-10:15 KEYNOTE	Joaquin Fernandez-Rossier (INL, Portugal) Atomic scale magnetometry with STM-ESR
10:15-11:00	Coffee Break / Poster Session / Exhibition
11:00-11:30 KEYNOTE	Gianluca Fiori (Universita' di Pisa, Italy) 2D Materials for ultra-flexible and sustainable electronics
11:30-12:00 KEYNOTE	Paolo Samorì (Université de Strasbourg, France) Dress them with molecules! Elevating 2D materials to a new dimension
12:00-12:15 ORAL	Elena Bailo (WITec GmbH, Germany) Correlative Raman imaging characterizes crystal properties of 2D materials
12:15-12:45 KEYNOTE	Luis Echegoyen (ICIQ, Spain) Fullerene Compounds for Enhanced Solar Cell Efficiencies, Electrocatalytic Applications and to Stabilize Unusual Actinide Clusters Inside
12:45-13:05 INVITED	Veronica Montes Garcia (University of Strasbourg, France) Chemically functionalized low-dimensional nanostructures for chemical sensing
13:05-13:20 ORAL	Xabier García Casas (CSIC, Spain) Plasma-enabled energy harvesters based on low dimensional materials
13:20-14:40	Cocktail Lunch (offered by Nanospain2024 organisers)
14:40-15:10 KEYNOTE	Angel Barranco (ICMSE-CSIC, Spain) Plasma processing of aerogel-like conformal coatings for photonic applications
15:10-15:25 ORAL	David Martín-Sánchez (Instituto de Microelectrónica de Sevilla, Spain) Exploiting randomly distributed pores in photonic structures for security applications to create hardware-based digital identity
15:25-15:45 INVITED	Pedro David García Fernández (ICMM-CSIC, Spain) Dirty and Messy Cavity-Optomechanics
15:45-16:15 KEYNOTE	Clivia M. Sotomayor Torres (INL, Portugal) Phononic crystals in patterned and in disordered MoS ₂ membranes
16:15-16:45	Coffee Break / Poster Session / Exhibition
16:45-17:05 INVITED	Manuel Marques (UAM, Spain) Magnetic control of electrically uncharged magneto-optical particles
17:05-17:20 ORAL	Nicolas Pazos Perez (Universitat Rovira i Virgili, Spain) Tuning the optical properties of gold nanostars
17:20-17:35 ORAL	Shoulong Chen (ICMAB, Spain) Pure spin current transmission in Nonmagnetic /Antiferromagnetic/Ferromagnetic (NM/AF/FM) heterostructures
17:35-17:55 INVITED	Danijela Gregurec (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany) Advanced magnetic nanomaterials at the frontier of the wireless neurotech
17:55-18:10 ORAL	Ferran Pujol Vila (Instituto de Microelectrónica de Barcelona (IMB-CNM-CSIC), Spain) Integrating Biomimetic Nanotopography and Plasmonic Photothermia for Bimodal Antibacterial Polymeric Surfaces

Friday June 07, 2024

09:00-09:20 INVITED	Ana Alcudia Cruz (Universidad de Sevilla, Spain) Multidisciplinary Approach to Understanding The Role of Nanoparticles
09:20-09:40 INVITED	Ernane De Freitas Martins (ICN2, Spain) Electrochemical molecular modeling: exploring the metal/inhibitor/water electrified interface
09:40-09:55 ORAL	Huixia Lu (Institut de Ciència de Materials de Barcelona (ICMAB-CSIC, Spain) Phosphate aggregation of PBS buffer affects heparin-protein interactions in 3D hydrogels
09:55-10:15 INVITED	Silvia Soria ("Nello Carrara" Institute of Applied Physics, Italy) Resonant Cavities for photoacoustic and photothermal characterization of nanoparticles
10:15-10:45	Coffee Break
10:45-11:15 KEYNOTE	Celia Rogero (Centro de Física de Materiales (CSIC-UPV/EHU, Spain) On-surface molecular sensors for application in neutrinoless double beta decay experiments
11:15-11:30 ORAL	Giorgi Shtenberg (Agricultural Research Organization Volcani Institute, Israel) Sers-Based Biosensor for Bacterial Pathogens Detection in Contaminated Foods
11:30-11:50 INVITED	Miguel Muñoz Rojo (ICMM-CSIC, Spain) Nanoscale thermal mapping of electronic devices
11:50-12:10 INVITED	David Soriano Hernández (University of Alicante, Spain) Scaling properties and valley effects in chromium trihalides
12:10-12:30 INVITED	Aurélien Viterisi (Université de Pau, France) Nanoporous anodic alumina membranes as gas diffusion layers for CO2 reduction catalysts
12:30-13:00 KEYNOTE	Blas Garrido (Universidad de Barcelona, Spain) Inkjet printing of next generation flexible nanodevices: memristors, photodetectors and perovskite LEDs
13:00	Closing