

Resumen propuestas TFM NANOMAT, curso 2018-2019

Titulo	Director(es)
Microfluidic approach to the green synthesis of covalent organic frameworks	Víctor Sebastián & Joaquín Coronas
Fabrication and characterization of nanocomposite Ni/HfO ₂ granular multilayers	Pedro Algarabel & José Á. Pardo
Development of responsive nanostructured supramolecular materials based on bent-core molecules	Blanca Ros
Preparation and characterization of nanostructures of pyrene-containing bent-core molecules by self-assembling techniques	Santiago Martín & Blanca Ros
Development of layered semiconductor-carbon composites for energy storage devices (supercapacitors and rechargeable batteries)	María Bernechea & M. Pilar Lobera
Particle engineering in metal organic framework ZIF-8	Joaquín Coronas
New colloidal nanocrystalline semiconductors for solar cells	María Bernechea & M. Pilar Lobera
New solar-light-active photocatalysts for persistent organic pollutants (POPs) removal in wastewater	María Bernechea & M. Pilar Lobera
Pt-based deposits grown in cryogenic conditions by Focused Ion Beam Induced Deposition (Cryo-FIBID) for applications in Nanoscience	José M. de Teresa
Microfluidic SERS platforms based on Au-SiO ₂ Plasmonic Nanostructures for SERS Detection of Neurotoxic Agents in Gas Phase	Reyes Mallada & M. Pilar Pina
Photodynamic therapy in the treatment of skin-associated infections	Manuel Arruebo & Teresa Alejo
Microencapsulation of eukaryotic and prokaryotic cells within alginate beads using microfluidics	Víctor Sebastián & Gracia Mendoza
Optimized nanocarriers from amphiphilic block copolymers by supramolecular chemistry	Luis Oriol & Milagros Piñol
Synthesis and Advanced Transmission Electron Microscopy characterisation of AgBiS ₂ nanoparticles for photovoltaics: influence of nanostructure on solar cell performance	María Bernechea & César Magén
Fabrication and applications of MOP ultrathin films obtained by the Langmuir-Blodgett (LB) method	Ignacio Gascón
Elaboration and study of 2D nanoparticle assemblies by Langmuir-Blodgett	Ignacio Gascón & Ainhoa Urtizberea
Elaboration and study of covalent organic frameworks	Ignacio Gascón & Olivier Roubeau
Immobilization of MNPs on cell membranes via cadherins for magnetic hyperthermia studies	María Moros & Raluca Fratila
Synthesis of electrospun oxide fibers for catalytic applications	Silvia Irusta
Fabrication of molecular electronic devices using simple chemical procedures	Pilar Cea & Santiago Martín
Fabrication of superconducting YBa ₂ Cu ₃ O ₇ quasi-monodimensional microwires by a chemical solution method	Irene Lucas & Antonio Badía
Synthesis and catalytic activity of nanoparticles for VOC removal	Guillermo Lázaro & Francisco J. Fernández

DNA-polymer hybrids by dynamic covalent chemistry	Jesús del Barrio & Silvia Hernández
Development of electrospun polymeric membranes for the treatment of degenerative joint diseases	Silvia Irusta & Gracia Mendoza
Analysis of proteins by local probe microscopy	Anabel Gracia
Nanopatterning of molecules on devices by Atomic Force Microscopy	Anabel Gracia
Preparation and study of functional nanostructures from nitrogen-rich molecules	Teresa Sierra & Raquel Giménez
Atomic resolution STEM analysis of resistive switching induced by local electric fields in SrFeOx films	César Magén & Rodrigo Fernández-Pacheco
Structural and magnetic properties of cobalt and iron nanowires grown by Focused Ion Beam Induced Deposition (FIBID)	José M. de Teresa & César Magén
Atomic configuration studies of misfit-layered compounds in the form of nanotubes	Raúl Arenal
In-situ microscopy analyses of carbon and related nanostructures	Raúl Arenal
Synthesis and characterization of Graphenic Carbonaceous Nanomaterials by CCVD	Antonio Monzón & Eva Romeo