

# **La Caixa Fellowship Program INPHINIT 2017**

## **Opportunities at ICMAB-CSIC**

<b>Project</b>	<b>PhD Advisor</b>
The implementation as transistors components of conjugated bio-inspired materials displaying switch on-off properties	Núria Aliaga
Two-dimensional organic hybrid structures for artificial photosynthesis	Esther Barrena
Hybrid photovoltaic and thermoelectric (PV/TE) devices based on organic semiconductors	Mariano Campoy
Hybrid organic/inorganic materials for sensing pollutants from the environment	Núria Crivillers
Synthesis and functionalization of metal organic frameworks by a sustainable CO <sub>2</sub> technology	Concha Domingo
Photo-writing in ferroelectric green memory devices	Ignasi Fina
Engineering brain-like neurons and synapse with ferroelectrics	Josep Fontcuberta
Metal-organic frameworks on surfaces for cancer theranostics	Arantzazu González
Using high pressure to unravel the physics of unconventional thermoelectric materials	Alejandro Goñi
Dynamical modulation of electron spins with microwaves	Gervasi Herranz
Preparation of tailor-made metal-organic nanomaterials for colon cancer targeting	Ana López

using supercritical fluid technology	
Bioinspired Magnetic Nanodevices	Ferràn Macià
New challenges in spin-orbit physics	Benjamín Martínez
Interface engineering for the fabrication of high performing organic field-effect transistors	Marta Mas-Torrent
Photonic Electrodes for Enhanced Light Matter Interaction in Optoelectronic Devices	Agustín Mihi
Development and optical properties of $\pi$ -conjugated systems incorporating boron clusters as good candidates for two photon absorption (TPA) process	Rosario Núñez
Two-dimensional organic/graphene structures with tailored properties by intercalation	Carmen Ocal
Hybrid Magnetic-Superconducting devices for Cryogenic Memory Applications	Anna Palau
New Routes for the Synthesis of Nanocarbon-based Hybrid Electrodes for High-performance Supercapacitors	Angel Pérez
Nanoelement integration in oxide films for novel electronics	Alberto Pomar
Highly Luminescent Organic Radical Nanoparticles (ONPs) for Bioimaging Applications	Imma Ratera
Mesoporous Magnetic Nanorods for Theranostics	Anna Roig and Martí Gich
Epitaxial ferroelectric oxide thin films with tailored lattice strain	Florencio Sánchez
Dynamic Molecular Bio-Interfaces for Controlled Environments Towards Vascular Morphogenesis	Jaume Veciana