POST-DOCTORAL RESEARCH ON MULTI-RESPONSIVE SPINTRONIC DEVICES BASED ON VAN DER

Company Description

CIC nanoGUNE is a Research Center devoted to conducting world-class nanoscience research for a competitive growth of the Basque Country. CIC nanoGUNE is a member of the Basque Research and Technology Alliance (BRTA) and is recognized by the Spanish Research Agency as a Maria de Maeztu Unit of Excellence.

Information

Deadline: 2021-12-19
Category: Business
Province: Gipuzkoa
City: Donostia-San Sebastián

Company

CIC nanoGUNE



Main functions, requisites & benefits

Main functions

The candidate will join a research line focusing on different research themes: Spintronics, Multifunctional devices and Advanced nanofabrication. We are mostly interested in the electronic properties of systems in reduced dimensions. More information can be found at https://www.nanogune.eu/nanodevices.The aim of the project is the realization of proof-of-concept devices based on van der Waals interfaces for spintronics. The tasks to be performed will include the fabrication of multi-functional devices based on 2D magnetic materials combined with other layered compounds or organic molecules, and the characterization of their electrical response to light and magnetic field.

Requisites

The successful candidate will have a PhD in Physics, Materials Science or a similar field and experience in the following skills: Handling of 2D Materials, fabrication of van der Waals heterostructures. Nanofabrication (e-beam lithography, materials growth and characterization, etching). Electrical transport measurements. Molecular functionalization. Previous knowledge in molecular electronics and/or spintronics. Proficiency in spoken and written English. The following points will also be considered: Previous track record in publications at the highest level. Self-motivated and a team player willing to coordinate the research efforts in 2D materialbased devices.

Benefits

The position is offered in the Nanodevices Group, co-led by Prof. L. Hueso Arroyo and Prof. F. Casanova Fernández (Lhueso@nanogune.eu / f.casanova@nanogune.eu). The group counts with extensive research facilities for fabrication and characterization of devices and several active research lines spanning from nanofabrication to 2D electronics and spin transport. We promote teamwork in a diverse and inclusive environment and welcome all kinds of applicants regardless of age, disability, gender, nationality, race, religion, or sexual orientation.