

Postdoctoral Fellowships

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CALL FOR APPLICATIONS 2025 - FELLOWS

Supervisor Maria Chamarro

Supervisor page https://scholar.google.fr/citations?user=DjXpX-YAAAAJ&hl=fr

Host Institution Centre National de la Recherche Scientifique (CNRS)

https://www.cnrs.fr/en

Research Lab Institute of NanoSciences of Paris

https://w3.insp.upmc.fr/en/insp-en/

Research Team Photonics and Coherence of Spin

https://w3.insp.upmc.fr/en/research/research-teams/photonics-and-

coherence-of-spin/

Project Title

Emission properties of individual halide perovskite nanocrystals

Project Description

Halide perovskites (HP) show outstanding photovoltaic and optoelectronic properties. The domains of nanophotonic and quantum technologies have timidly start to be explored. Thus the emission of single photons in the HP nanocrystals (NCs) was observed and the possibility of initializing of the electronic spin thanks to the strong spin-orbit coupling was demonstrated. The main objective of this proposal is to explore properties of HP NCs as new quantum dots.

Keywords

halide perovskite, single emitter, nanocrystals

Description of the Host Research Lab

The Institute of NanoSciences of Paris (INSP) brings together teams from four condensed matter physics laboratories. Its scientific objectives are at the heart of fundamental research in nanosciences, but it also has a wide range of applications: optoelectronics and telecommunications, earth sciences and the environment, catalysis and medical diagnostics.