

Open PhD position on “Novel silicon photonic devices enabled by disruptive materials”

Field of research

Silicon photonic integrated circuits (Si-PICs) have reached an unprecedented degree of maturity in the last years and they are currently used in many commercial devices and emerging applications. To enhance and develop new key functionalities, the integration of CMOS-compatible materials featuring outstanding electro-optic properties, e.g., phase change materials (PCMs) and transparent conducting oxides (TCOs), has become a promising path to reach these objectives.

To continue the work done in our group on this topic, we are looking for a new highly motivated and bright team member. The main tasks will focus on modeling, design, and experimental characterization of nanophotonic devices for applications mainly in the datacom and telecom sectors. Fabrication will be done by the process and equipment team in the 250 m² cleanroom of our research center, and in collaboration with international partners. We are particularly looking for self-motivated, creative, and innovation-driven candidates. We offer an interdisciplinary and stimulating research environment with a distinguished infrastructure.

Requirements

Suitable applicants must have a university degree in physics, telecom/electrical engineering, or a similar subject. Master studies related to optics and nanotechnology are highly valued. Knowledge and experience with integrated optics and solid-state physics are a plus. A strong motivation for science and proficient written and oral communication skills in English are crucial.

Additional information

- Starting date: September-October 2021.
- Contract type: Predoctoral contract. Up to 4 years (renewable yearly). Possibility of teaching duties.
- Salary (gross per year): equivalent to a standard Spanish predoctoral contract.
- Other benefits: Flexible working and many benefits for being part of Universitat Politècnica de València: nice university community, excellent public transport network (metro, tram, bus, bike), free parking, fitness and sports facilities...

How to apply

Applicants should send a motivation letter (1 page) and a detailed CV. Recommendation letters are encouraged. Please submit your application with these documents by email to Prof. Pablo Sanchis (pabsanki@ntc.upv.es) and Ms. Isabel Salas (misalas@ntc.upv.es).

The Nanophotonics Technology Center is committed to providing equal career opportunities for women and men. To ensure equal opportunities, applications by women with the required qualifications are explicitly welcome.

