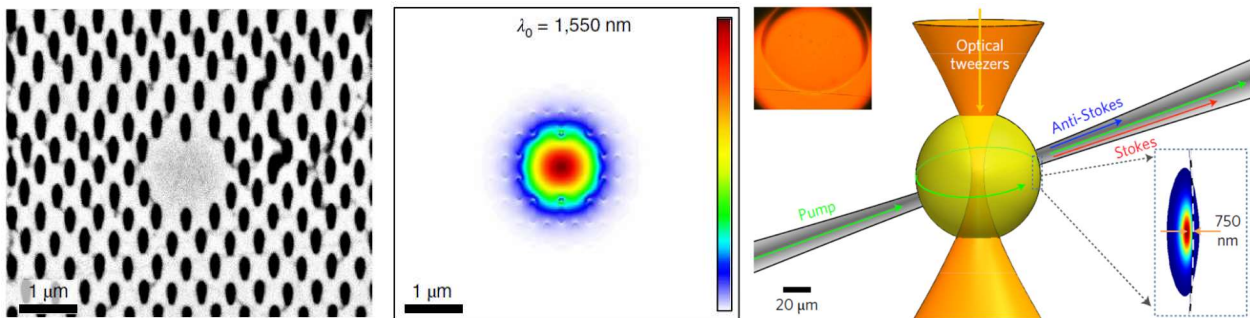


PhD Fellowship Position in 3D Laser Nanostructuring and Fabrication of Photonic Sensors



You have a Master's degree in Photonics, Electronics Engineering, Applied Physics or equiv.

You are passionate about learning new science and developing new optical technologies. You fulfil the requirements to subscribe as a doctoral student. You are interested in micro-photonics and fiber optics technology and its applications. You have experimental laboratory experience in optics and/or electronics, and you like programming and have good mathematical skills.

Project: Your PhD work will be funded for 3-years within a Spanish National project and a Spanish "FPI" call ([link to last year's call](#)). You will be involved in the development of innovative concepts for 3D digital femtosecond laser lithography of photonic components which have never been developed before. Your work will consist on (1) developing new photonic components based on a novel 3D laser nanolithography discovered by your supervisors, and (2) developing -from numerical simulation to final laboratory prototype- an optical environmental micro-resonator sensor laser-fabricated inside an optical crystal. A wide range of scientific abilities will therefore be developed. You will work within the new **Laser-matter interactions and Extreme Application Photonics lab (LEAP Lab) in Tenerife, Spain**, as well as in close contact with leading research groups and companies from Spain, Italy, France, Germany, UK, Israel and Australia.

Diversity: We actively seek for diversity in our group to enhance innovation and fight gender and racial inequalities. If you belong to an underrepresented group do not hesitate to contact us.

If you are interested please contact as soon as possible: **Dr. Airán Ródenas** (arodenas@ull.es) and **Dr. Leopoldo Martín** (lmartin@ull.es) as there will be various administrative constraints to prepare well in advance (several months) to start the position in 2020/21.

Recent works by the supervisors:

Nature Photonics 2019: "[Three-dimensional femtosecond laser nanolithography of crystals](#)"

Nature Comms 2016: "[Water-walled microfluidics for high-optical finesse cavities](#)"

Nature Photonics 2016: "[Ripplon laser through stimulated emission mediated by water waves](#)"