

## Sort CV

I got profoundly involved in science and research during my undergraduate studies, which were financially supported by an “undergraduate collaboration scholarship” (Beca de colaboración 2006-07, Ministerio de Education, Spain) at the Physic-Chemistry department in the University of Vigo in Spain. Since then I have obtained my PhD degree (University of Vigo, *summa cum laude*) in physical chemistry, with title “Synthesis, Optical Characterization and Sensing Application of gold nanostars”.

As PhD student, I worked on a number of projects that were focused on the optimization of substrates for ultra-sensing applications based in surface enhanced Raman scattering (SERS). In fact, I developed, together my colleagues, new methods to fabricate high yield and reproducible SERS substrates. Some of these substrates were used to detect drugs (e.g. cocaine) and cancer biomarkes, or for intracellular SERS imaging within living cells. During this period, I was able to co-author fifteen scientific publications, seven as first author, and one book chapter. At the same time, I was able to learn and appreciate how research is really being conducted. Moreover, I trained undergraduate researchers and helped new graduate students with their projects. These experiences will be very helpful for starting my academic career as an independent researcher. In addition, I served as a laboratory instructor for general chemistry classes which gave me teaching experience and further insights into the interest of undergraduates, particularly those who did not want to stay in science.

As Postdoc research and group leader, I was employed in the Bionanomaterials group at the Adolphe Merkel Institute in Fribourg in Switzerland. In this last period, I developed reproducible, robust and stable nanoparticle libraries and new particle characterization protocols with the goal of understanding the interactions between nanomaterial and cells and thus to be able to apply these nanomaterials in the medicine. Another focus of my research is the design of hybrid composites, involving metal, semiconductor, magnetic and polymeric nanostructures for SERS imaging and sensing – I was awarded a L’Oreal Fellowship “For Woman in Science 2013” for this project. In 2015, I was included in the list of the 100 most influential young people at the francophone Swiss zone, awarded by L’Hebdo journal. I am currently employed as Research Fellow funded by a Marie-Curie COFUND in the Water Quality unit at the Department of Life Science in INL (Braga, Portugal). Until now, I have co-authored thirty-six publications and many more are in writing.