

Ultrahigh vacuum exfoliation and functionalization of 2D materials

2D materials are very sensitive to their environment. This is because they do not have a bulk part and thus all atoms can be affected by species adhering to the surface of the 2D material. In order to preserve a clean surface, we propose a method for exfoliation of the 2D materials in ultra-high vacuum conditions. This allowed us to explore the properties of these materials in a pristine state. The next step is functionalization, which must be performed in a way that does not introduce impurities. I will present our approach to reach this goal.