

Graphene based interfaces, application and characterization

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Abstract

A range of applications of graphene as a functional interface are presented. The deployment of graphene into devices as an interface between different materials, requires accurate characterization and repeated assessments during all the fabrication steps, in order to target a successful integration with diverse fabrication technologies. The tuning of graphene properties allows it to implement different functionalities but it requires careful and repeated investigations, applying various spectroscopic techniques while processing such delicate, one atom thin coating. In this light, we present a series of different applications ranging from PV devices to optical absorber, energy storage and biomedicine.