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ABSTRACT

Structural Tailoring of the Electronic Properties of 2D Systems

A. Tejeda

Université Paris-Saclay, CNRS, Laboratoire de Physique des Solides,
91405, Orsay, FR.

Applications often require the precise engineering of the energy levels, which can be adjusted by structural modification. Here we will consider on different structures that allow to tailor the electronic properties of two-dimensional systems. In particular, we will focus on superperiodic structural periodicities on the graphene buffer layer on SiC [1] and on graphene grown on vicinal surfaces of noble metal [2] as well as on confinement effects in lateral nanoribbons of graphene [3-4] or on vertical quantum wells on MoS2 [5].

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