

Fibonacci quasiregular graphene-based superlattices: Quasiperiodicity and its effects on the transmission, transport and electronic structure properties

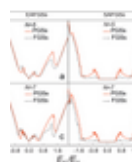
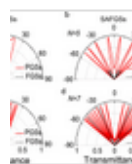
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Abstract

We study the transmission, transport and electronic structure properties of aperiodic Fibonacci monolayer graphene-based structures (AFGBSs). The **transfer matrix method** has been implemented to obtain the **transmittance**, linear-regime conductance and electronic structure. In particular, we have studied two types of aperiodic graphene-based structures: (1) electrostatic AFGBSs (EAFGBSs), structures formed with electrostatic potentials, and (2)