**On the electronic properties of graphene-based nanocomposites**

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**Author’s viewpoints:**

In the context of electronic conductivity, Graphene is best electrical conductor identified till date [1]. This property makes it an ideal candidate for fabricating nanocomposites for flexible energy devices [1]. However, at present, the main challenge is to fabricate graphene-based nanocomposites by the assembly of graphene nanosheets based on traditional synthesis techniques [2]. To address the aforementioned challenge, recently, there has been a huge volume of research aimed towards addressing structure-property correlation in graphene-based nanocomposites, synthesized by a number of different methods [2]–[4]. The electronic properties of these composites, are mainly dependent on two process parameters (viz. (i) the nature of reinforcement and (ii) method of synthesis) and a structural parameter [5]–[9]**.** Among these, the two process parameters highly influence the structural parameter and play a significant role in the electronic transport mechanisms in this type of materials [10]–[14]. In addition, the electron-point defect, electron-2D interface interaction and the electron-porosity interaction (especially in the context of porous nanomaterials) largely influence the electronic properties.

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