

A brief review on graphene and its Applications

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Abstract : Occasional attempts to decipher the mystery of graphene can be seen back from mid 20th century. There has been a certain bombardment in the research around the globe, in the field material science in the year of 2004 , when Prof. Andre K Geim and Prof. Kstoya Novoselov who belong to the University of the Manchester, discovered as well as isolated a single atomic thin film of carbon for the first time by scotch tape procedure which is also known as micro mechanical cleavage or mechanical exfoliation technique. The two body team collected the Nobel prize in physics in the year 2010 in recognition of their break-through. Materials based upon graphene and its composites have a noteworthy applications in electronics, biomedical aids, actuators, membranes, flexible wearable sensors. This review article summarizes various scientific published data and research papers so as to present a comprehensive analysis of the state of art.

Keywords: Graphene , flat bandas , multiphased band structures, quantum hall effect, physiochemical properties

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