

Method for bacterial reduction of graphene oxide

Abstract:

Research on graphene has opened a new avenue all together in nanotechnology fraternity with its wide applications from electronics to biosensors. Graphene, a 2D sheet of carbon atoms is indubitably budding up as the most potential material because of its unique and outstanding electronic, mechanical, thermal and optical properties which opens a way for its exploitation in a wide spectrum of applications. Apparently with these promising properties, mass volume of graphene is needed in increasing demand. Mass production of graphene in a cost effective manner has been a major challenge. The present invention provides a method for reducing graphene oxide and more specifically a method for bacterial reduction of graphene oxide. The method used is easy, low cost, reproducible green biological route for the reduction of graphene oxide which avoids the use of hazardous, carcinogenic chemicals and expensive laboratory instruments.

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