



Graphene Composites

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Message from the Guest Editor

Graphene is a 2D material made of sp^2 hybridized carbon atoms which have enormous strength. It has extraordinary mechanical, electrical and thermal properties. One square meter sheet of graphene could support four kilograms and has a large surface area. The composite of graphene opens up materials with extraordinary properties. The composites with metals, polymers and ceramics have unusual mechanical, thermal and electrical properties. The potential of these composites has encouraged extraordinary research activities in several areas, such as new alloys, biomedical aids, flexible wearable sensors and actuators, electronics and aerospace. Today's world is facing major challenges from viruses such as COVID-19, as no vaccine is currently available, making the coronavirus life threatening. The whole world is in search of materials that could prevent the spread of the disease. Here, graphene composites and carbon nanotube composites could help reduce the problems which arise from viruses. The applications could be in the detection of the virus, the production of personal protective equipment, nose masks, storage systems, and transportation systems, etc.

