

Study of the reduced graphene oxide suspension and the behavior of its particles on the surface of water sub-phase

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Keywords: reduced graphene oxide, Langmuir–Blodgett trough, correlation spectroscopy of scattered light, atomic-force microscope.

Abstract

The particles of the reduced graphene oxide (RGO) were obtained from natural and synthetic graphite using the chemical reduction method. These particles have been investigated by atomic-force microscopy. The suspensions of the particles in CCL₄ were studied using correlation spectroscopy of scattered light that allowed to obtain size distribution before and after sonication. We obtained isotherms of RGO for various amounts of material applied on the surface of the water sub-phase in the Langmuir–Blodgett trough. Layers of RGO could be transferred by the Langmuir–Blodgett method on silicon substrates.