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A self-corrugated surface of graphene oxide to enhance sensitivity and responsibility for various graphene oxide applications

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We are looking forward to the simple but strong method to enhance a sensitivity and responsibility of Graphene Oxide (GO) by forming a self-corrugated surface of GO. The self-corrugated surface was formed by the reaction of graphene oxide with Gallium chloride. The surface of GO is more corrugated with the concentration of gallium hydroxide during the dry of GO powder. The graphene oxide structure was distorted due to the three hydroxyl groups of gallium hydroxide. The properties of wrinkled GO were investigated by scanning electron microscope, energy dispersive spectroscopy, X-ray diffraction, Raman spectroscopy and atomic force microscope, respectively. This self-corrugated GO have superior advantages over normal GO for a higher sensitivity and responsibility for sensor applications.

Biography

Seungdu Kim is currently a student of Korea Aerospace University, Republic of Korea. He has published numerous research papers and articles in reputed journals and has various other achievements in the related studies.

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