

GRAPHENE-BASED SENSOR, MEASUREMENT DEVICE USING SAME, SPECIMEN MEASUREMENT METHOD, AND SPECIMEN ANALYSIS METHOD

ABSTRACT

A graphene-based sensor, a measurement device using the same, and a method of measuring and analyzing a specimen are provided. The graphene-based sensor according to an embodiment of the present disclosure includes a substrate, a doped region formed by doping a partial region of the substrate with impurities, an insulator layer stacked on the substrate except for a portion of the doped region, a graphene layer stacked on the doped region, a first electrode connected to the graphene layer, and a second electrode connected to the doped region.

(Fig. 1a)