

Annealing of the Contact between Graphene and Metal: Electrical and Raman Study

Authors : A. Sakavičius, A. Lukša, V. Nargelienė, V. Bukauskas, G. Astromskas, A. Šetkus

Abstract : We investigate the influence of annealing on the properties of a contact between graphene and metal (Au and Ni), using circular transmission line model (CTLM) contact geometry. Kelvin probe force microscopy (KPFM) and Raman spectroscopy are applied for characterization of the surface and interface properties. Annealing causes a decrease of the metal-graphene contact resistance for both Ni and Au.

Keywords : Au/Graphene contacts, graphene, Kelvin force probe microscopy, NiC/Graphene contacts, Ni/Graphene contacts, Raman spectroscopy

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