
Obtaining and properties research methods of the graphene

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Methods for the obtainment and structuring of graphene films are implemented and proposed. An integrated research methodology graphene synthesized by single inlet acetylene by CVD, defining the topology, number of layers, the occurrence (presence) of chemical impurities, structural defects and surface stress in grapheme is described. Testing structures of grapheme are investigated by "semicontact" atomic force microscopy (AFM) in combination with confocal microscopy of Raman scattering (RS). The survey was conducted by measuring complex SmartSPM & Raman produced by AIST-NT Zelenograd.

Keywords: *graphene, graphene transistor structure, atomic force microscopy (AFM), combinational light scattering spectroscopy, micro-Raman mapping, chemical vapor deposition (CVD), polymethyl methacrylate (PMMA).*

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