

Supporting materials for manuscript

Enhanced weak localization effect in few layer graphene

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1. Sample preparation.

One of the hardest aspects of working with graphene is being able to create and find it successfully and consistently. We are using the "scotch-tape" method to prepare graphene. This technique is simple for making high quality sample and is low cost. No special equipment needed, and you can qualitatively find the layers of the graphene based on the color under the optical microscope.

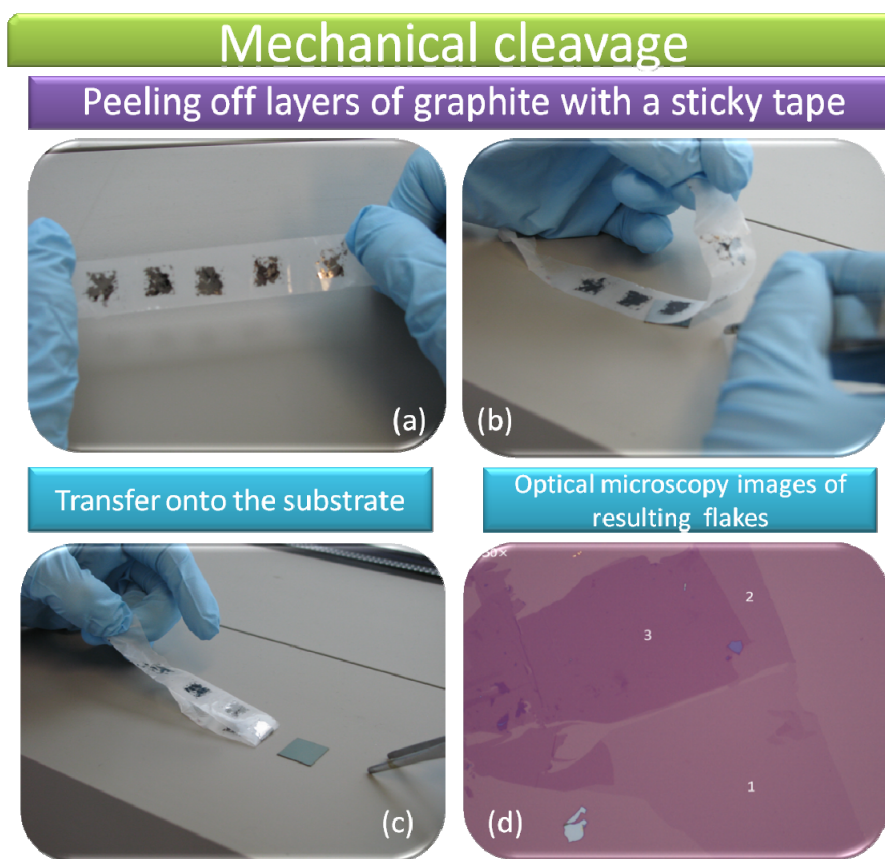


Fig.1 .Process of the scotch tape method

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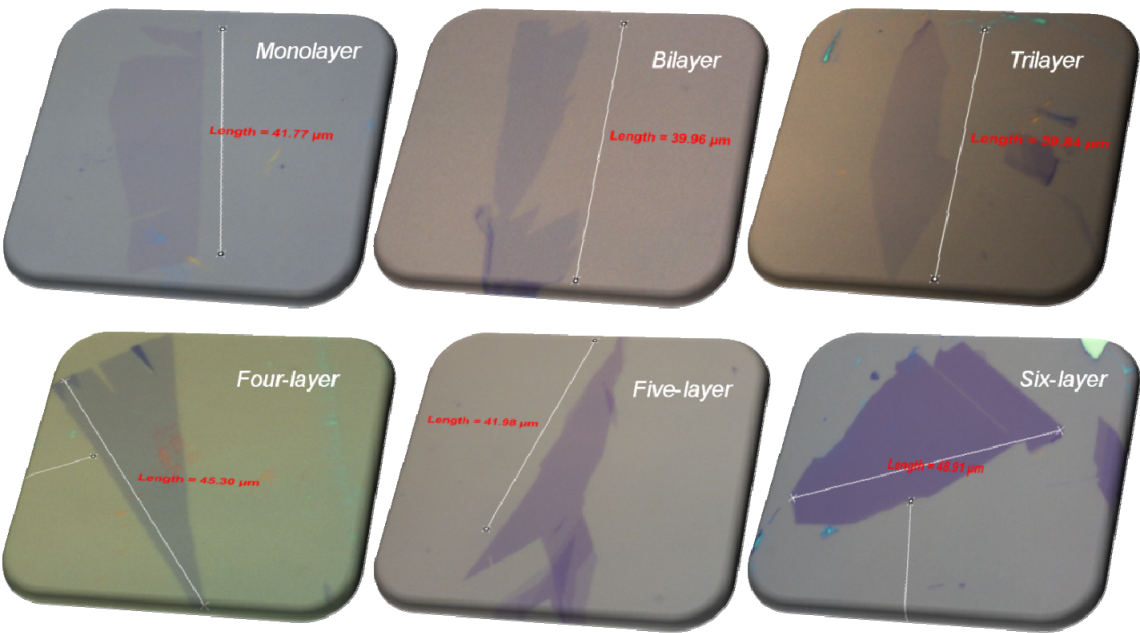
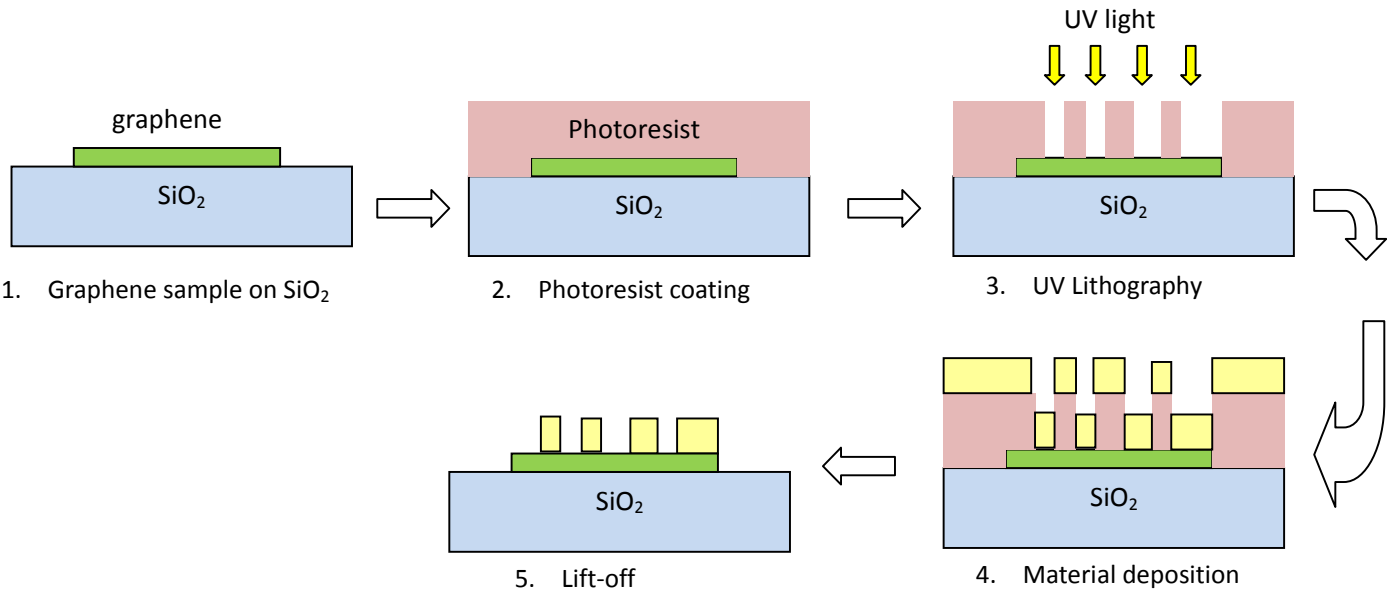


Fig.2. Optical image of a SiO₂ substrate covered with multilayer graphene

2. Fabrication of a graphene interconnect and measurement



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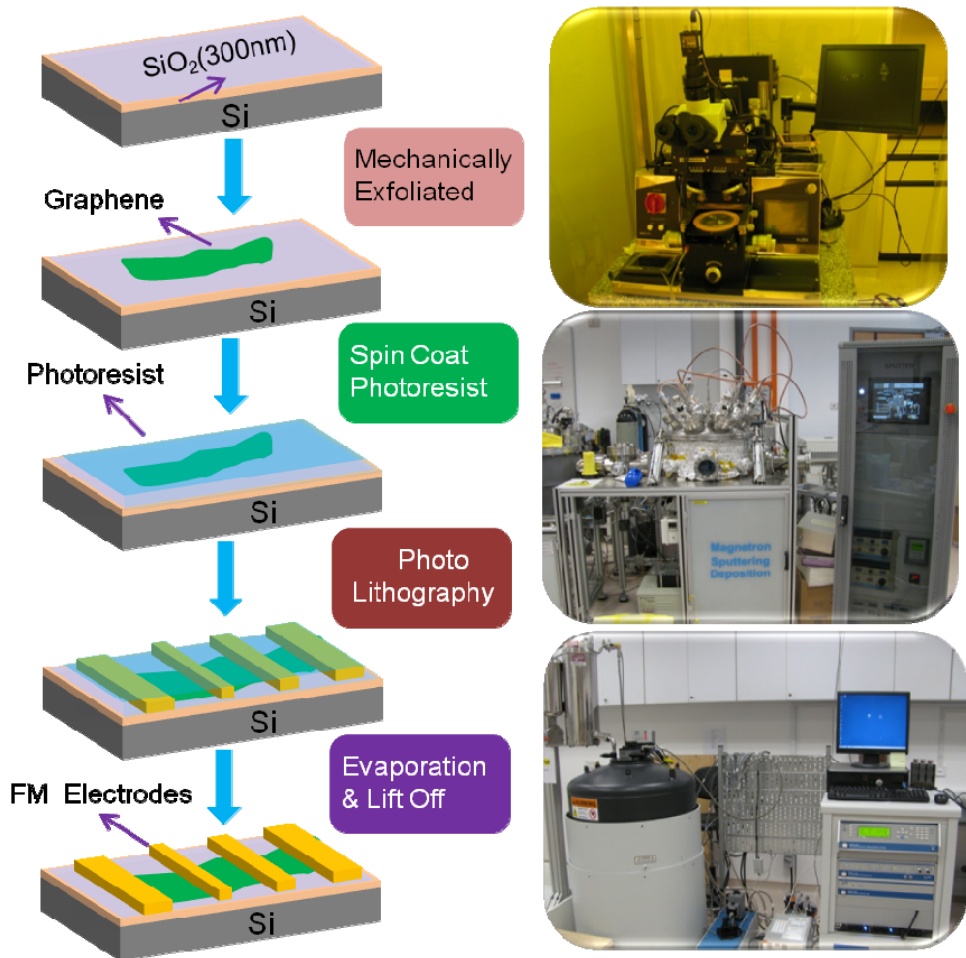


Fig.3.Schematic illustrations of the step -by- step fabrication process of the graphene interconnect.

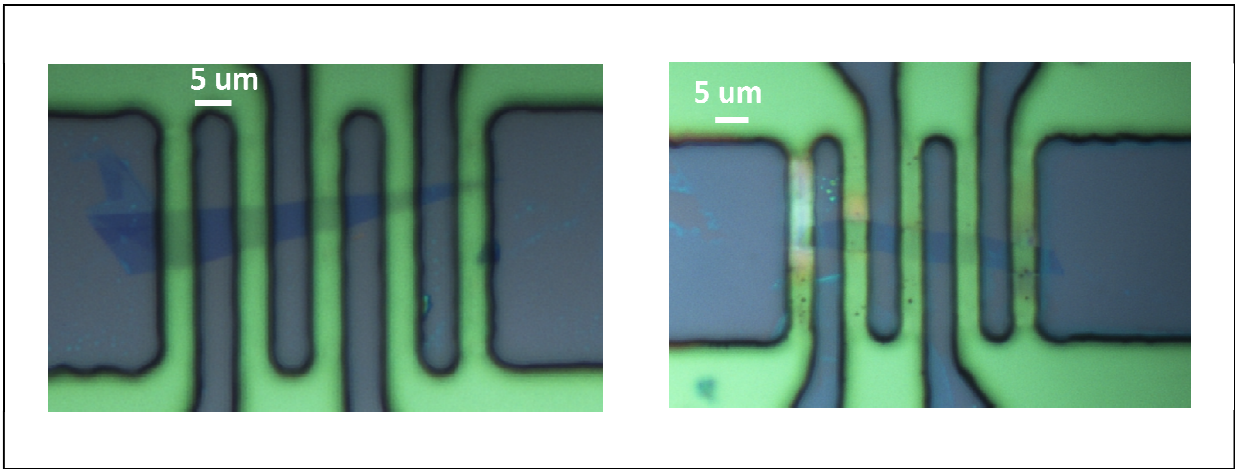


Fig.4.Microscopy image of graphene interconnects.

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Fig.5. Device is wire bonded to the sample holder and electronic transport measurements are done by PPMS (Quantum Design).