Two Point-Contact Method for the Electrical Characterization of Graphene-On-Insulator Samples

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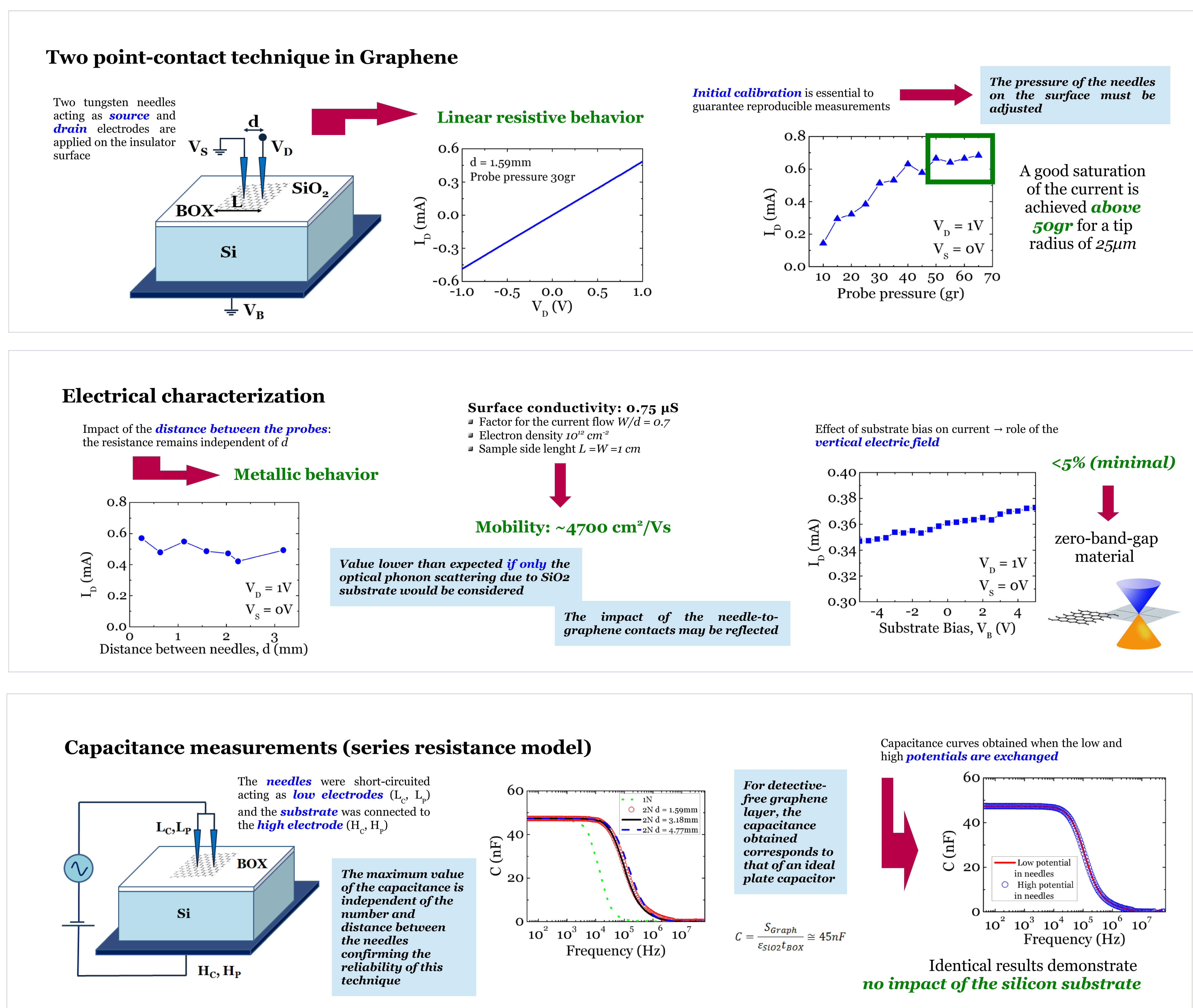
Graphene is a promising candidate as a material for future electronics. However, a long way has still to be run. New characterization tools to study and monitor its properties has to be developed. These new tools should target its key electronic applications (i.e. Graphene-On-Insulator for device fabrication). In this work, we introduce a new method for the electrical characterization of graphene layers.



$$C = \frac{S_{Graph}}{\varepsilon_{SiO2} t_{BOX}} \cong 45nF$$

CONCLUSIONS

In this work we have introduced a new method of electrical characterization of Graphene-On-Insulator. It has been demonstrated that the technique is reliable to extract electrical parameters and may serve to determine the quality of graphene samples (density of impurities, defects on surface, etc.).

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