

Graphene as a platform for sensors

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Abstract

Over the past years, extensive efforts have been placed in the research and development of graphene-based applications, as a result certain applications have experienced an increased level of maturity and achieved higher technology readiness levels (TRLs) among them is that of sensors.

Graphene's electronic and mechanical properties make it an ideal candidate to be applied in various types of sensors. The market for sensors is extremely large since it includes many industries such as automotive, electronics and healthcare among others. Therefore, it is an excellent starting platform for graphene applications.

During this talk, I will cover the fabrication of graphene at wafer scale (up to 200mm) and the use of graphene in various types of sensors including ion sensors (ISFETs) [1-3], gas sensors [4] and biosensors [5].

References

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