

Wafer Scale Integration of Graphene

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Abstract

Graphene has great potentials for applications in different fields such as electronics, optoelectronics, and sensors. However, the final functional application still relies on the state-of-the-art platform such as silicon technology process line, due to its maturity for circuit and system realization. Therefore, a path to integrate graphene to such traditional fabrication platform needs to be developed, in order to make the fancy material closer to reality. In this presentation, graphene processing will be introduced from different technology aspects, such as material growth, transfer, interface treatment, doping control, electrical contact optimization. The status and progress at AMO will be introduced. The new project 2D Experimental Pilot Line will be introduced, the target of which is to facilitate graphene foundry service to public in Europe.