

## Electrical Properties of CVD-Graphene on SiC

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**Abstract :** In this paper, we investigate the electrical properties of graphene grown by Chemical Vapor Deposition (CVD) on the Si face of SiC substrates. Depending on the growth condition, hole or electron doping can be achieved, down to a few  $10^{11}\text{cm}^{-2}$ . The high homogeneity of the graphene and the low intrinsic carrier concentration, allow the remarkable observation of the Half Integer Quantum Hall Effect, typical of graphene, at the centimeter scale.

**Keywords :** graphene, quantum hall effect, chemical vapor, deposition, silicon carbide

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