

Title

2D material integration in 300 mm silicon production line

Abstract

We discuss the range of potential 2D material-based devices in current and future applications. Many of today's 2D based devices are produced on a small-scale using lab based methods and frequently using lift-off processes. To allow 2D based products it is required to scale up the number of integrated devices as well as the wafer size. Moreover, co-integration of 2D and more conventional materials like Si will be required. In the 2nd part of the presentation we will focus on the introduction of MX₂ materials in the 300 mm pilot line, focusing on the challenges and potential solutions.