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## Graphene Device Fabrication

Graphene, a single atom-thick sheet of carbon atoms extracted from graphite, has attracted a huge amount of attention of the science and engineering communities from all over the world since its discovery in 2004. Despite many previous experimental efforts, this is the first real two-dimensional material ever realized in the lab at the single atomic level. It turns out, however, that almost anybody with a pencil, a Scotch tape, and a silicon chip can make a graphene sample at home. In this talk, I will show you how graphene samples are mechanically exfoliated from graphite and identified with an optical microscope. For any kind of measurement, device fabrication is the first step after sample identification. It requires careful consideration of the requirements of the specific kind of experiment to be performed. I will discuss the ideas and methods used to design, wire and test the microscopic electronic system. The unique physical and electronic properties of graphene, combined with its possibilities for industrial applications have inspired many researchers putting lots of efforts to improve the graphene sample quality. I will also discuss the fabrication techniques we conducted for making better samples.