

## MACHIDA LAB.

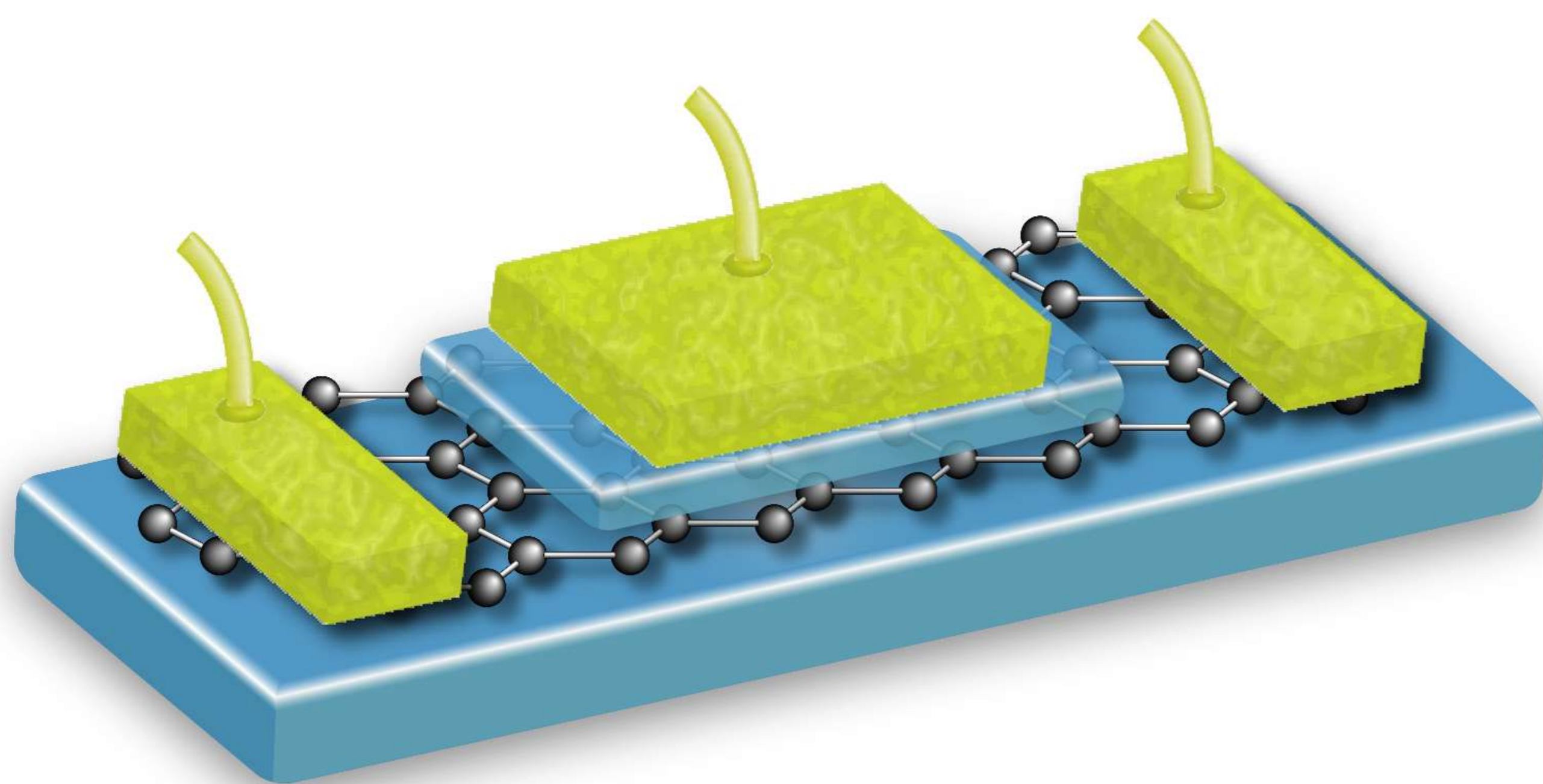
## Science of Atomic Layer Materials



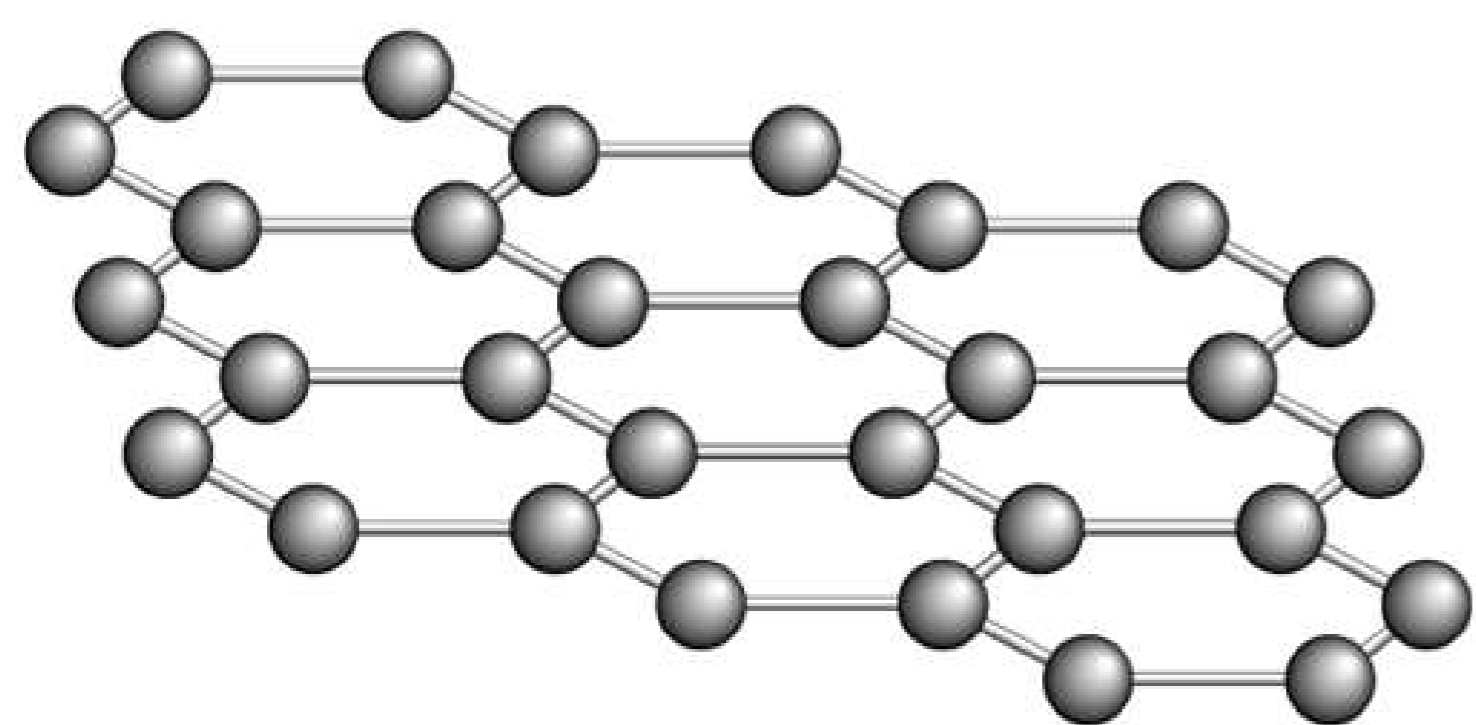
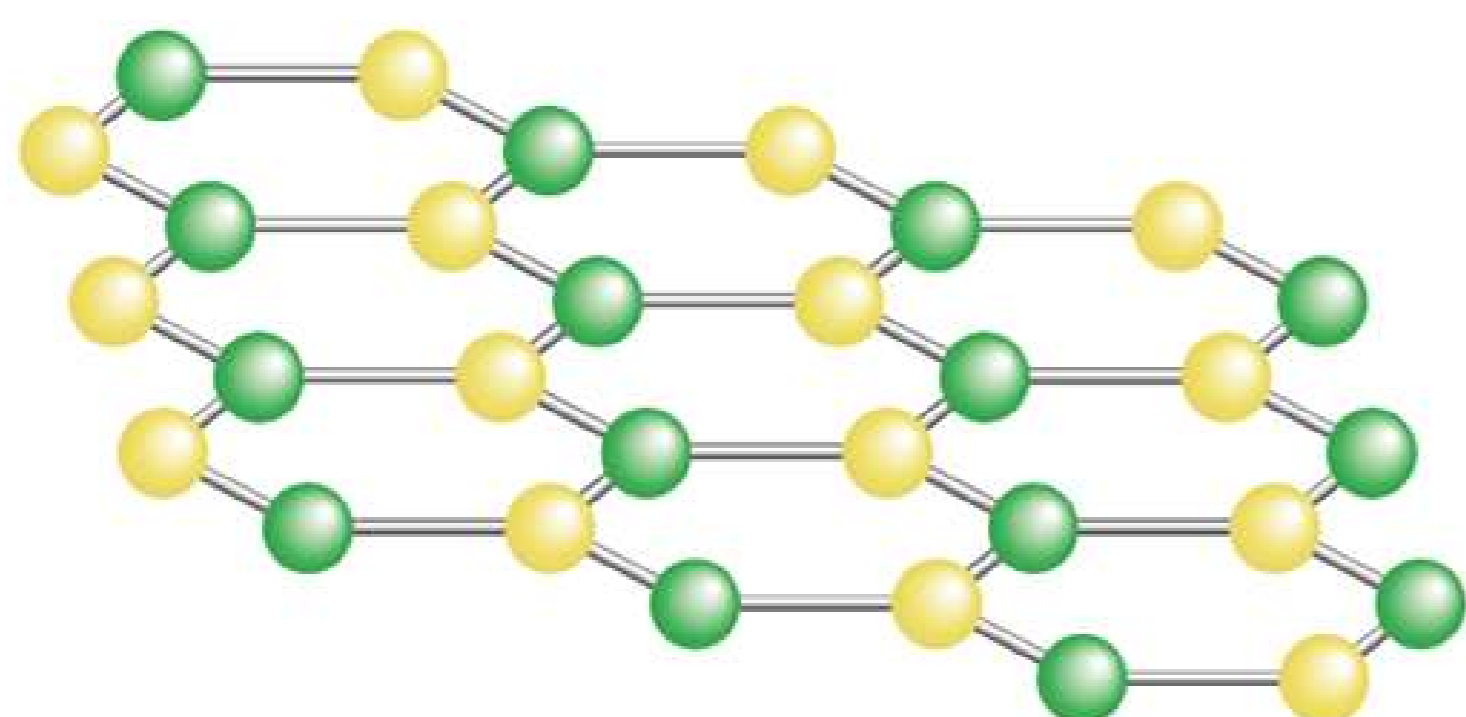
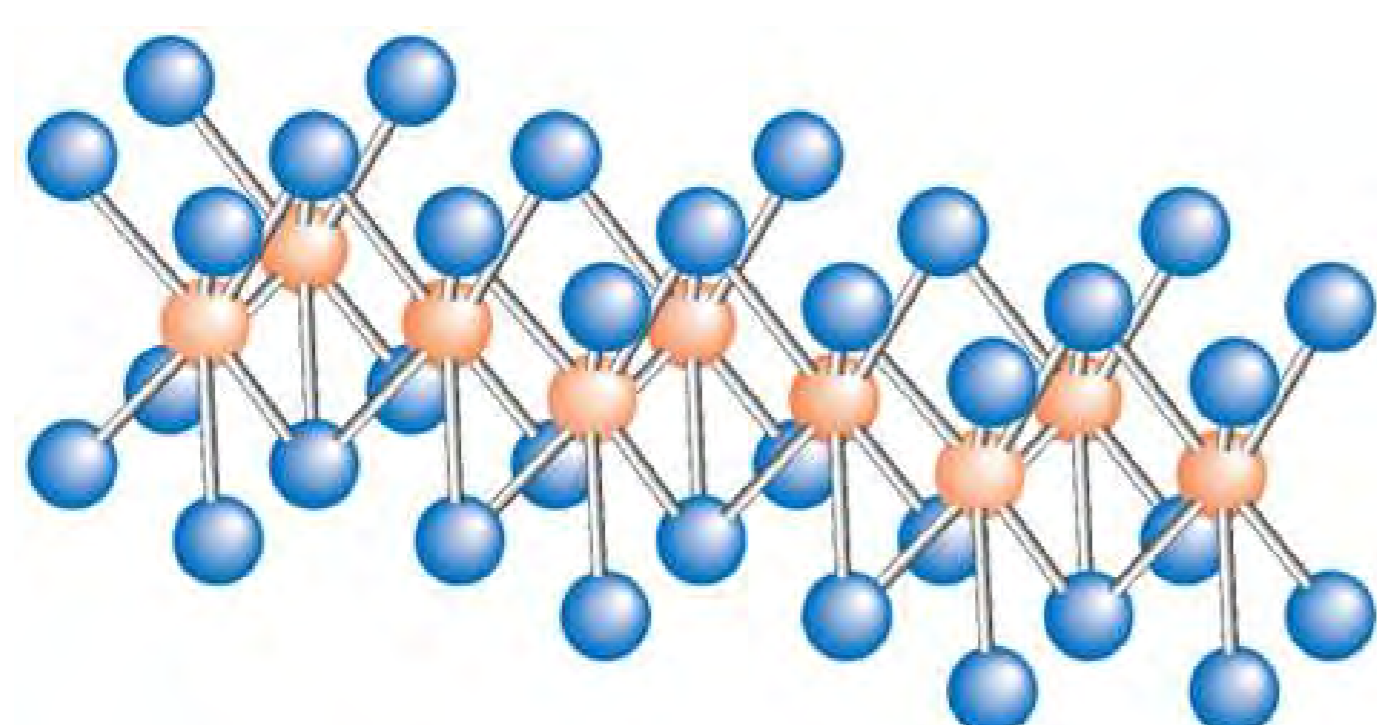
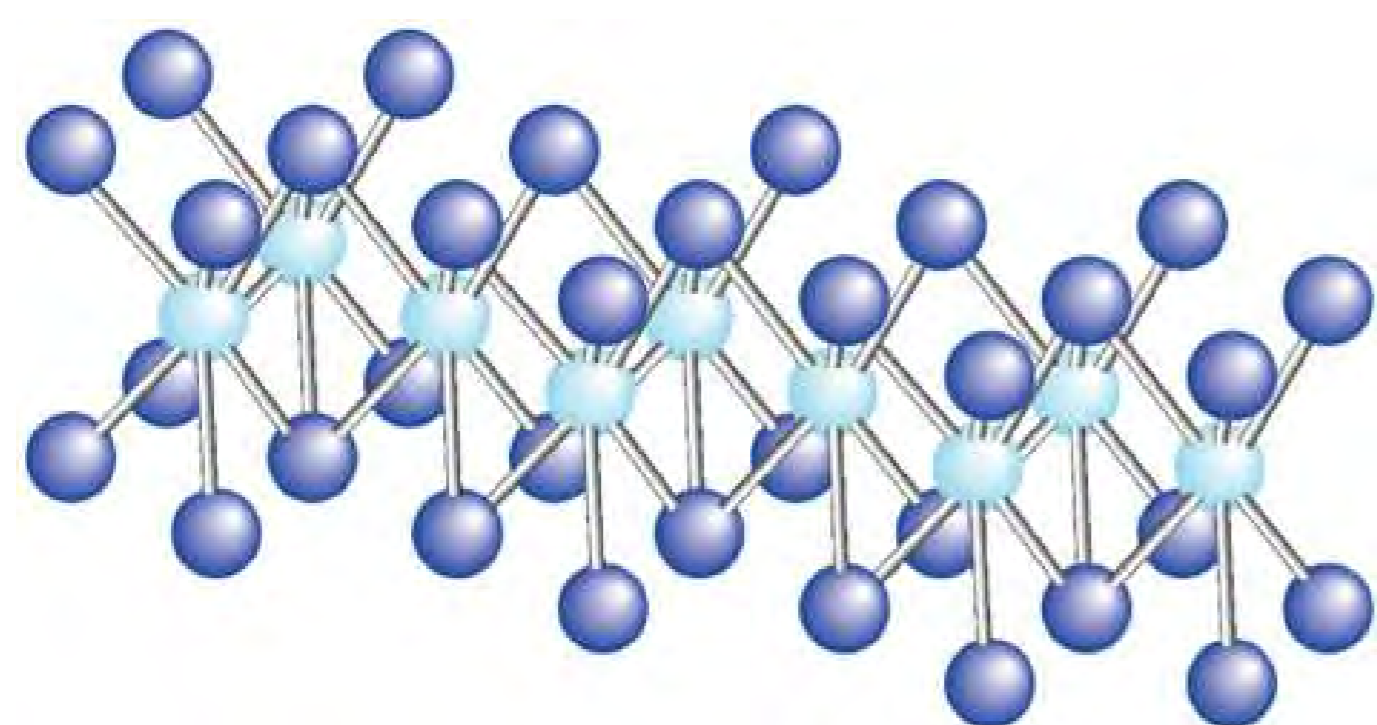
Department of Fundamental Engineering

Quantum Transport in Low-dimensional Systems

Department of Materials Engineering, Graduate School of Engineering

<http://qhe.iis.u-tokyo.ac.jp/>

The graphene and other one atomic layer thick crystals reveal unusual quantum physics. By combining material science, nano-fabrication, and low temperature (10 mK) measurement, we explore the science and the engineering of graphene and two-dimensional crystals.

**Graphene****One atomic layer thick Dirac material****h-BN****2D insulator****MoS<sub>2</sub>****Monolayer semiconductor****NbSe<sub>2</sub>****Superconductivity in one monolayer**