

Motivation

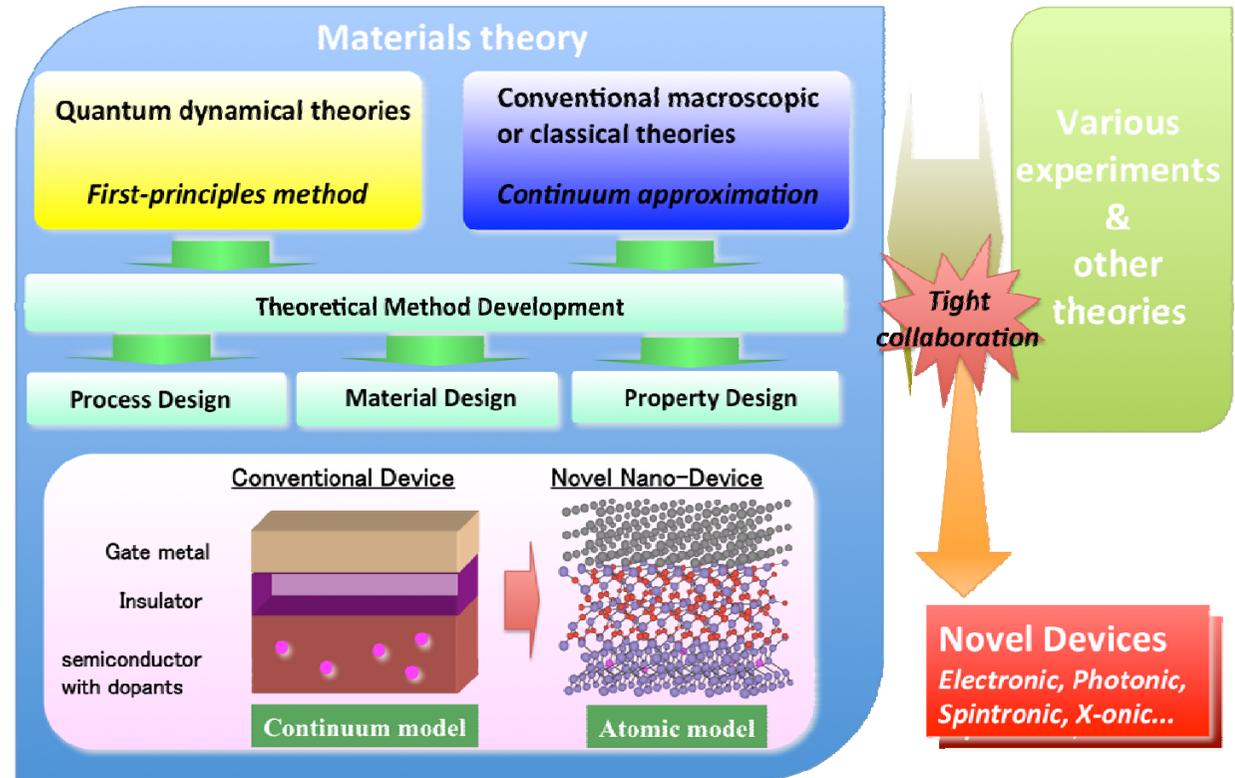
Graphene is novel device material. Formation of vast and uniform substrate is the first step for its practical use. Epitaxial growth on SiC has been investigated by computational experiments based on the first-principles calculation.

Originality

Graphene is found to form naturally on SiC. New graphene sheet is also found to form preferably in the space between the old graphene sheet and the SiC substrate. A reason for epitaxial growth is unveiled.

Impact

It is expected to obtain readily fabricated nano-graphenes on substrate as well as high-quality vast and uniform graphene substrate. It will expand the potential of graphene novel devices.



Study of epitaxial growth of graphene on SiC

