

Abstract

The mechanical and thermal properties of polycrystalline materials are often dominated by the size of their grains and by the atomic structure of their grain boundaries. These properties are especially pronounced in graphene (two-dimensional materials). In our review, we will discuss how to describe the grain boundary in graphene firstly, then we will discuss the effects of grain boundary on graphene's properties, and at last we would have an open discussion on grain boundary in graphene.