## Abstract

An etching method is provided. The method includes: placing a substrate having SiGe or Ge on a surface thereof in a chamber; supplying an etching gas for etching SiGe or Ge to the substrate maintained at a first temperature at which no etching reaction occurs and adsorbing the etching gas onto the surface of the substrate; and changing the temperature of the substrate to a second temperature at which a reaction between the SiGe or the Ge and the etching gas occurs and etching the SiGe or Ge.