CLAIMS

1. A method for heat treatment of a plurality of semiconductor wafers horizontally placed on a supporting member coated with SiC in a vertical heat treatment furnace, the method comprising:

performing heat treatments while switching the supporting member and a heat treatment condition such that the supporting member is continuously used in a heat treatment under either one of a first condition and a second condition for a certain period of time and then continuously used in a heat treatment under the other condition for a certain period of time, wherein

the supporting member is coated with SiC by CVD, and

the heat treatment under the first condition is performed at 1000°C or higher in an atmosphere containing a rare gas and not containing oxygen, and the heat treatment under the second condition is performed at 1000°C or higher in an atmosphere containing oxygen and not containing a rare gas.

2. The method for heat treatment according to claim 1, wherein the rare gas is an argon gas.

3. The method for heat treatment according to claim 1 or claim 2, wherein each of the certain periods of time for which the heat treatments under the first and the second conditions are continued is 200 hours or more and 400 hours or less.

4. The method for heat treatment according to any one of claims 1 to 3, wherein the switching of the supporting member and the heat treatment condition is repeated a plurality of times.