PLASMA PROCESSING METHOD AND PLASMA PROCESSING APPARATUS

ABSTRACT

This plasma processing method includes a film formation step, a plasma processing step and a removal step. In the film formation step, a silicon oxide film is formed on the surface of a member within a chamber by means of plasma of an oxygen-containing gas and a silicon-containing gas at a flow rate ratio of the oxygen-containing gas to the silicon-containing gas of 0.2-1.4. In the plasma processing step, after the formation of the silicon oxide film on the surface of the member, an object to be processed that has been carried into the chamber is subjected to plasma processing with use of plasma of a processing gas. In the removal step, after carrying the plasma-processed object out of the chamber, the silicon oxide film is removed from the surface of the member by means of plasma of a fluorine-containing gas.

Representative Drawing

FIG. 2