ABSTRACT

In a gas processing unit according to the invention, a showerhead 32 having gas holes 33, which are arranged in such a manner that the opening density per unit area is larger in the peripheral area than in the central area, is arranged just below a penetrable window 23 to face a wafer W. A gas-holes obstructing member 34 is arranged below the showerhead 32 for controlling to open and close the gas holes 33. Thus, a uniform process can be conducted to a surface of a substrate such as a wafer by using plasma.