

ABSTRACT

A substrate processing apparatus includes: a substrate process chamber having a plasma generation and a substrate processing space; a substrate mounting table installed inside the substrate processing space; an inductive coupling structure provided with a coil installed to be wound around an outer periphery of the plasma generation space, and configured so that an electrical length of the coil is an integral multiple of a wavelength of a high-frequency power supplied to the coil and a diameter of the coil is larger than that of the substrate; a substrate mounting table elevating part for raising or lowering the substrate mounting table; a gas supply part for supplying the processing gas to the plasma generation space; and a controller for controlling the substrate mounting table elevating part so that the substrate mounted on the substrate mounting table is positioned at a height lower than a lower end of the coil.

FIGURE 1