

METHOD OF FORMING METAL FILM AND APPARATUS FOR FORMING METAL FILM

ABSTRACT

A technique for suppressing a decrease in film formation rate when forming a metal film using a raw material having characteristics of decreasing film formation rate over time. A method of forming a metal film includes: a step of forming the metal film on a surface of a substrate by supplying film formation gases containing a metal halide as a raw material of the metal film to the substrate and reacting the film formation gases; and a step of, in response to the forming the metal film having characteristics of a decreased film formation rate over time, vacuum-exhausting an atmosphere where the substrate is disposed while supplying a cleaning gas that reacts with byproducts generated by the reaction of the film formation gases, after stopping supplying the film formation gases; wherein the forming the metal film is performed again after the vacuum-exhausting.

(Fig. 3)