

SUBSTRATE PROCESSING METHOD, SEMICONDUCTOR DEVICE PRODUCTION
METHOD, SUBSTRATE PROCESSING DEVICE, AND PROGRAM

ABSTRACT

The present invention includes a step (a) for performing, a prescribed number of times, a cycle that includes a step (a1) for supplying, under a prescribed condition, a first gas to a substrate having a recess on a surface thereof and forming a first substance containing a first element on the surface of the substrate, and forming a film of a prescribed substance containing the first element on the substrate. The prescribed condition satisfies a temperature condition that the temperature of the substrate is not less than the decomposition temperature of the first gas and a first condition that an opening adsorption amount, which is the adsorption amount of the first substance at the opening of the recess, increases in a first period after the start of supply of the first gas, the opening adsorption amount asymptotically approaches a prescribed value in a second period after the first period, and the opening adsorption amount increases in a third period after the second period. The step (a1) is terminated during the second period.

FIGs. 5A and 5B