

METHOD OF PROCESSING SUBSTRATE, METHOD OF MANUFACTURING
SEMICONDUCTOR DEVICE, SUBSTRATE PROCESSING APPARATUS, AND
PROGRAM

ABSTRACT

There is provided a technique that includes: removing a portion of a substance Y from a substrate by performing a cycle a predetermined number of times, the cycle including: (a1) supplying a first gas containing a first halogen element to the substrate, including a surface of the substance Y containing an element X, to form a first product, containing the first halogen element and the element X, on the substrate; and (b1) supplying a second gas containing a second halogen element to the substrate to convert a portion of the first product into a second product containing the element X and having a higher vapor pressure than the first product, wherein (b1) is performed under a condition where a portion of the substance Y is removable from the substrate when the second gas is supplied to the substance Y not containing the first halogen element on the surface.

Fig. 3