ABSTRACT

A sputtering apparatus includes: a processing chamber; a substrate holder configured to hold a substrate with a substrate holding surface in a processing space in the processing chamber; a first target holder configured to hold a first target such that a first surface of the first target faces the processing space; and a second target holder configured to hold a second target such that a second surface of the second target faces the processing space, wherein the first target holder holds the first target such that an orthogonal projection vector of a first normal vector, which is a normal vector of the first surface, with respect to a virtual plane including the substrate holding surface is directed to a direction away from the substrate, and the second target holder holds the second target such that an orthogonal projection vector of a second normal vector, which is a normal vector of the second surface, with respect to the virtual plane is directed to a direction away from the substrate.