

Abstract

Provided is a method of manufacturing a crystallized stacked structural body excellent in manufacturing efficiency. The present invention is characterized by including: a stacked structural body-forming step of forming a stacked structural body (7) in which an Sb_2Te_3 layer (5) having a thickness of from 2 nm to 10 nm and a GeTe layer (6) having a thickness of more than 0 nm and 4 nm or less are stacked, and a trace addition element (S or Se) is incorporated at a content of from 0.05 at% to 10.0 at% into the GeTe layer (6) on an orientation control layer (4) configured to give, to the Sb_2Te_3 layer (5) and the GeTe layer (6) at the time of their crystallization, a common crystal axis, the step being performed under a temperature of less than 100°C including room temperature; an Sb_2Te_3 layer-crystallizing step of crystallizing the Sb_2Te_3 layer (5) by heating and holding the stacked structural body (7) at a first crystallization temperature of 100°C or more and less than 170°C; and a GeTe layer-crystallizing step of crystallizing the GeTe layer (6) by heating and holding the stacked structural body (7) in which the Sb_2Te_3 layer (5) is crystallized at a second crystallization temperature of 170°C or more and 400°C or less.