ABSTRACT OF THE DISCLOSURE

(CoFe)ZrNb/Ta/Hf BASED TARGET MATERIAL AND METHOD FOR PRODUCING THE SAME

A (CoFe)ZrNb/Ta/Hf based target material is provided which is capable of achieving a high sputtering efficiency and a high sputtering effect by increasing the leakage magnetic flux in the magnetron sputtering, and a method for producing the target material. This target material is made of an Fe-Co based alloy comprising not less than 80 atomic % in total of Fe and Co having an Fe:Co atomic ratio of 80:20 to 0:100, and less than 20 atomic % of one or more selected from the group consisting of Zr, Hf, Nb and Ta. The Fe-Co based alloy comprises a Co-Fe phase being a ferromagnetic phase, and the one or more selected from the group consisting of Zr, Hf, Nb and Ta are solid-solved into the Co-Fe phase in a total amount of 0.5 to 2 atomic %.