

ALLOY FOR SEED LAYER IN MAGNETIC RECORDING MEDIUM,
AND SPUTTERING TARGET MATERIAL

ABSTRACT

There is provided an alloy for a seed layer in a magnetic recording medium, capable of providing a Ni-based intermediate layer on a soft-magnetic undercoat film (SUL) with magnetism and capable of increasing a magnetic permeability. The alloy comprises: 2 to 20 at% of an M1 element which is one or two or more selected from the group consisting of W, Mo, Ta, Cr, V, and Nb, based on the alloy; 0 to 10 at% of an M2 element which is one or two or more selected from the group consisting of Al, Ga, In, Si, Ge, Sn, Zr, Ti, Hf, B, Cu, P, C, and Ru, based on the alloy; and the balance being at least two of Ni, Fe, and Co. The amounts of Ni, Fe, and Co are set to (i) ratios of Ni:Fe:Co=98-20:0-50:0-60 and $Fe+Co \geq 1.5$ or (ii) a ratio of Ni:Fe:Co=98-20:2-50:0-60 in at % based on the total amount of Ni+Fe+Co.