CLAIMS

1. An alloy for a seed layer in a magnetic recording medium, comprising:

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 Ni, Fe, and Co in ratios of Ni:Fe:Co=98-20:0-50:0-60 and Fe+Co≥1.5 in at% based on a total amount of Ni+Fe+Co.

2. The alloy according to claim 1, consisting of 2 to 20 at% of an M1 element based on the alloy; 0 to 10 at% of an M2 element based on the alloy; and the balance being Ni, Fe, and Co and unavoidable impurities.

3. An alloy for a seed layer in a magnetic recording medium, comprising:

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 Ni, Fe, and Co in a ratio of Ni:Fe:Co=98-20:2-50:0-60 in at% based on a total amount of Ni+Fe+Co.

4. The alloy according to claim 3, consisting of 2 to 20 at% of an M1 element based on the alloy; 0 to 10 at% of an M2 element based on the alloy; and the balance being Ni, Fe, and Co and unavoidable impurities.

5. The alloy according to claim 1 or 2, comprising one or two of W and Mo.

6. The alloy according to claim 3 or 4, comprising one or two of W and Mo.

7. The alloy according to claim 1 or 2, comprising more than 5% of Cr.

8. The alloy according to claim 3 or 4, comprising more than 5% of Cr.

9. The alloy according to claim 1 or 2, comprising more than 0% and 10 at% or less of 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.

10. The alloy according to claim 3 or 4, comprising more than 0% and 10 at% or less of 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.

11. A sputtering target material constituted by the alloy according to any one of claims 1 to 10.

12. A magnetic recording medium comprising a seed layer constituted by the alloy according to any one of claims 1 to 10.

CLAIMS:

1. An alloy for a seed layer in a magnetic recording medium, wherein the alloy is a Ni-Fe-Co-M alloy, comprising:

Ni, Fe, and Co in ratios of Ni:Fe:Co=98-20:0-50:0-60 and Fe+Co≥1.5 in at%, and

2 to 20 at% of an M element which is one or two or more selected from W, Mo, Ta, Cr, V, and Nb;

wherein the alloy has a magnetism of 0.2T or more, and an intensity ratio I(111)/I(200) of 0.7 or more, wherein the intensity ratio of I(111)/I(200) is a ratio of an intensity of X-rays diffracted on a (111) plane to an intensity of X-rays diffracted on a (200) plane of fcc phase.

2. An alloy for a seed layer in a magnetic recording medium, wherein the alloy is a Ni-Fe-Co-M alloy, comprising:

Ni, Fe, and Co in ratios of Ni:Fe:Co=98-20:2-50:0-60 in at%, and

2 to 20 at% of an M element which is one or two or more selected from W, Mo, Ta, Cr, V, and Nb;

wherein the alloy has a magnetism of 0.2T or more, and an intensity ratio I(111)/I(200) of 0.7 or more, wherein the intensity ratio of I(111)/I(200) is a ratio of an intensity of X-rays diffracted on a (111) plane to an intensity of X-rays diffracted on a (200) plane of fcc phase.

3. The alloy for a seed layer in a magnetic recording medium according to claim 1 or 2, comprising one or two of W and Mo among the M elements.

4. The alloy for a seed layer in a magnetic recording medium according to any one of claims 1 to 3, comprising more than 5% of Cr among the M elements.

5. The alloy for a seed layer in a magnetic recording medium according to any one of claims 1 to 4, comprising, in

addition to the M elements, 0 to 10 at% of one or two or more selected from Al, Ga, In, Si, Ge, Sn, Zr, Ti, Hf, B, Cu, P, C, and Ru.

6. A sputtering target material constituted by the alloy for a seed layer in a magnetic recording medium according to any one of claims 1 to 5.

7. A magnetic recording medium constituted by the alloy for a seed layer according to any one of claims 1 to 5.