

ABSTRACT

MAGNETIC RECORDING MEDIUM, METHOD OF MANUFACTURING
THEREFOR, AND MAGNETIC READ/WRITE APPARATUS

The present invention provides a magnetic recording medium having excellent magnetic read/write characteristics and thermal stability, a method of manufacturing therefor, and a magnetic read/write apparatus. The magnetic recording medium comprising a soft magnetic undercoat film 2, an orientation control film 3, a perpendicular magnetization film 4, and a protective film 5, that are formed on a non-magnetic substrate 1, wherein the orientation control film 3 has an hcp structure and, at the same time, $\Delta \theta 50$ of the (0002) orientation plane is set within a range from 3 to 10 degrees and a difference ($\Delta \theta 50 \text{ (mag)} - \Delta \theta 50 \text{ (ori)}$) between $\Delta \theta 50 \text{ (ori)}$ of the orientation control film 3 and $\Delta \theta 50 \text{ (mag)}$ of the perpendicular magnetization film 4 is set within a range from 1 to 8 degrees.

From Ni, Cu, Pd, Ag, Pt, Ir, Au and Al.

Fig. 1



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