

ABSTRACT

Provided is a sputtering target of nonmagnetic-particle-dispersed ferromagnetic material comprising a phase (A) such that nonmagnetic particles are dispersed in a ferromagnetic material formed from a Co-Cr alloy containing 5at% or more and 20at% or less of Cr and Co as the remainder thereof, and schistose textures (B) with a short side of 30 to 100 μ m and a long side of 50 to 300 μ m formed from a Co-Cr alloy phase in the phase (A); wherein each of the foregoing nonmagnetic particles has such a shape and size that the particle is smaller than all hypothetical circles with a radius of 1 μ m around an arbitrary point within the nonmagnetic particle, or a shape and size with at least two contact points or intersection points between the respective hypothetical circles and the interface of the ferromagnetic material and the nonmagnetic material. Consequently, obtained is a high-density sputtering target of nonmagnetic-particle-dispersed ferromagnetic material whose crystal grains are fine, which realizes improvement of PTF (pass through flux) of the target, high-speed deposition with a magnetron DC sputtering system, reduction in the particles (dust) and nodules generated during the sputtering process, minimal variation in quality, and improvement of mass productivity.