

TANTALUM SPUTTERING TARGET

ABSTRACT

Provided is a tantalum sputtering target that contributes to improvement of film thickness uniformity during a high-power sputtering. A tantalum sputtering target having a purity of 99.99% by mass or more and an average value of Vickers hardness on a sputtering surface of from 85 to 110 Hv, the tantalum sputtering target satisfying both of the following conditions (1) and (2):

- (1) when a cross section perpendicular to the sputtering surface is measured by EBSP, an average value of Kernel Average Misorientation values (KAM values) is from 0.2° to 2.8° ; and
- (2) when a cross section perpendicular to the sputtering surface is measured by EBSP, an average value of orientation area ratios of a {100} plane oriented at a misorientation of within 15° relative to a normal direction of the sputtering surface is 20% or more.

FIG. 1