

TANTALUM SPUTTERING TARGET AND METHOD FOR PRODUCING SAME

ABSTRACT

5 A tantalum sputtering target, wherein, on a sputtering surface of the tantalum sputtering target, an average crystal grain size is 50 μm or more and 150 μm or less, and a variation in a crystal grain size is 30 μm or less. A tantalum sputtering target, wherein, on a sputtering surface of the tantalum sputtering target, an orientation rate of a (200) plane exceeds 70%, an orientation rate of a (222) plane is 30% or less, an average crystal grain size is 50 μm or more and 150 μm or less, and a variation in a crystal grain size is 30 μm or less. By controlling the crystal grain size of the target, or the crystal grain size and the crystal orientation of the target, effects are yielded in that the discharge voltage of the tantalum sputtering target can be reduced so that plasma can be more easily generated, and the voltage drift during deposition can be suppressed.