

ABSTRACT

A vacuum process method for a magnetic recording medium having a surface protective layer for protecting a magnetic recording layer formed on a substrate includes a ta-C film forming step of forming a ta-C film on the magnetic recording layer, a transportation step of transporting a substrate on which the ta-C film is formed, a radical generation step of generating radicals by exciting a process gas, and a radical process step of irradiating a surface of the ta-C film with the radicals.