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ABSTRACT OF THE DISCLOSURE

SUBSTRATE FOR MAGNETIC RECORDING MEDIUM AND METHOD FOR
MANUFACTURING SAME

Provided is a surface-treated substrate in which the roughness of the surface of the substrate is controlled. The surface-treated substrate can form a magnetic recording medium in which head flying stability is maintained and which has a magnetic film that can achieve high recording densities. Also provided is a method for roughening the surface of the substrate. More specifically, provided is a surface-treated silicon substrate for a magnetic recording medium in which a surface used for forming a recording layer has 40 to 1000 protrusions per $1 \mu\text{m}^2$ with a maximum height of 10 nm or less and an average roughness of 0.3 to 2.0 nm, and in which there are no defects or spots on any of the surface. Furthermore, provided is a method for manufacturing the surface-treated silicon substrate for the magnetic recording medium, comprising a step of etching a surface of a silicon substrate, wherein ultrasound is applied to the surface of the silicon substrate with the substrate shaken or rotated. Also provided is a magnetic recording medium, comprising the silicon substrate.

FIG.1(A)