ABSTRACT

COMPOSITE SUBSTRATE MANUFACTURING METHOD AND COMPOSITE SUBSTRATE

To provide a composite substrate whereby a nanocarbon film having no defect can be manufactured at low cost.

A method for manufacturing a composite substrate, including: implanting ion from a surface of a single crystal silicon carbide substrate to form an ion-implanted region; bonding an ion-implanted surface of the single crystal silicon carbide substrate and a main surface of a handle substrate, and peeling the single crystal silicon carbide substrate at the ion-implanted region to transfer a single crystal silicon carbide thin film onto the handle substrate, wherein the surface to be bonded of the single crystal silicon carbide substrate and the surface to be bonded of the handle substrate each has a surface roughness RMS of 1.00 nm or less.

[Fig.1]