METHOD FOR MANUFACTURING SOI SUBSTRATE

ABSTRACT OF THE DISCLOSURE

An SOI substrate is manufactured by the following method. An insulating layer is formed on a semiconductor substrate; an embrittled region is formed in the semiconductor substrate on which the insulating layer is formed by irradiating the semiconductor substrate with ions; a base substrate is heated to reduce moisture content attaching to a surface of the base substrate, wherein the base substrate after the heating faces and is in contact with the semiconductor substrate in which the embrittled region is formed, so that the base substrate and the semiconductor substrate are bonded to each other; and the bonded base substrate and semiconductor substrate is heated to separate the semiconductor substrate along the embrittled region to form a semiconductor layer over the base substrate. In this manner, the SOI substrate in which bonding defects are be sufficiently reduced can be provided.

Figure 1C