ABSTRACT OF THE DISCLOSURE

TEMPORARY SEMICONDUCTOR STRUCTURE BONDING METHODS AND RELATED BONDED SEMICONDUCTOR STRUCTURES

Methods of fabricating semiconductor structures include implanting atom species into a carrier die or wafer to form a weakened region within the carrier die or wafer, and bonding the carrier die or wafer to a semiconductor structure. The semiconductor structure may be processed while using the carrier die or wafer to handle the semiconductor structure. The semiconductor structure may be bonded to another semiconductor structure, and the carrier die or wafer may be divided along the weakened region therein. Bonded semiconductor structures are fabricated using such methods.

Figure 4