

Method for transferring a layer from a heterostructure

Abstract

The invention relates to a method for transferring a layer from a heterostructure (H) to a receiver substrate (3), comprising the following steps in succession:

- providing a donor substrate (1) of a first material and a carrier substrate (2) of a second material,
- bonding the donor substrate (1) to the carrier substrate (2),
- thinning the donor substrate (1), so as to form said heterostructure (H) comprising the thinned donor substrate (10) on the carrier substrate (2),
- the formation of the heterostructure (H) further comprising a step of removing a peripheral portion from the donor substrate (1, 10),
- forming a weakened region (12) in the thinned donor substrate (10) so as to delimit a layer (11) of the first material to be transferred,
- bonding said heterostructure (H) to a receiver substrate (3), the layer (11) of the first material to be transferred being located at the bonding interface,
- detaching the donor substrate (10) along the weakened region (12) so as to transfer the layer (11) of the first material to the receiver substrate (3).

[Figure 2B]