Method for Manufacturing Compound Material Wafers

ABSTRACT

The invention relates to a method for manufacturing compound material wafers, comprising the steps: providing an initial donor substrate (1), forming a predetermined splitting area (4) in the initial donor substrate (1), attaching the initial donor substrate (1) to a handle substrate (2), and detaching the donor substrate (1) at the predetermined splitting area (4), thereby transferring a layer (6) of the initial donor substrate (1) onto the handle substrate (2) to form a compound material wafer (10). To improve the cost effectiveness of the method the method further comprises depositing a layer (12) onto the remainder (9) of the donor substrate after the detaching step to recover at least partially the thickness of the initial donor substrate (1) and reusing the donor substrate (1) with the deposited layer (12) as initial donor substrate (1) in step a). The invention also relates to electronic, opto-electronic or optical components comprising at least a part of the compound material wafer fabricated according to the method.