

Double superlattices obtained by layer transfer, structure and
fabrication process

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ABSTRACT

Process (500) for fabricating a structure comprising a
superlattice stack, comprising the steps of forming (510_{Car}) a
first superlattice (Stck1) on a first substrate, by stacking a
10 plurality of first channel layers in alternation with a
plurality of first sacrificial layers; forming (520_{Don}) a
second superlattice (Stck2) on a second substrate, by stacking
a plurality of second channel layers in alternation with a
plurality of second sacrificial layers; and joining (560) the
15 second superlattice (Stck2) to the first superlattice (Stck1)
via a dielectric separation layer that separates the first
superlattice (Stck1) from the second superlattice (Stck2) and
keeps them fastened to each other, the first superlattice
(Stck1), the separation layer and the second superlattice
20 (Stck2) being stacked in this order.

Fig. 5