

TITLE: Process for fabricating a semiconductor or piezoelectric structure**ABSTRACT**

5 The invention relates to a process for fabricating a semiconductor or piezoelectric structure, comprising the following steps in succession:

(a) providing a donor substrate (11) comprising a semiconductor or piezoelectric layer (5),

(b) providing a receiver substrate (12),

10 (c) treating a free surface (7) of the donor substrate (11) and/or a free surface (9) of the receiver substrate (12),

(d) bonding the donor substrate (11) to the receiver substrate (12), said at least one treated surface (7, 9) being at the interface between the donor substrate (11) and the receiver substrate (12), and

15 (e) transferring a portion (3) of the semiconductor or piezoelectric layer (5) from the donor substrate (11) to the receiver substrate (12),

the treatment of the free surface (7) of the donor substrate (11) and/or of the free surface (9) of the receiver substrate (12) comprising the following steps in succession:

(c1) chemical mechanical polishing,

(c2) removal of matter in a peripheral region of the polished surface (7, 9).

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Figure for the abstract: Figure 9