

Title (en)
SEMICONDUCTOR STRUCTURE COMPRISING AN ELECTRICALLY CONDUCTIVE BONDING INTERFACE, AND ASSOCIATED MANUFACTURING METHOD

Title (de)
HALBLEITERSTRUKTUR MIT EINER ELEKTRISCH LEITENDEN BONDSCHNITTSTELLE UND ZUGEHÖRIGES HERSTELLUNGSVERFAHREN

Title (fr)
STRUCTURE SEMI-CONDUCTRICE COMPRENANT UNE INTERFACE DE COLLAGE ELECTRIQUEMENT CONDUCTRICE, ET PROCEDE DE FABRICATION ASSOCIE

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Abstract (en)
[origin: WO2022008809A1] The invention relates to a semiconductor structure (100) that comprises a useful layer (10) made of monocrystalline semiconductor material and extending along a main plane (x, y), a support substrate (30) made of semiconductor material, and an interface area (20) between the useful layer (10) and the support substrate (30), the support substrate extending parallel to the main plane (x, y), the structure (100) being characterised in that the interface area (20) comprises nodules (21) that: - are electrically conductive, in that they contain a metal material forming ohmic contact with the useful layer (10) and the support substrate (30); - have a thickness, along an axis (z) normal to the main plane (x, y), of less than or equal to 30 nm; - are separate or adjoining, the separate nodules (21) being separated from each other by regions (22) of direct contact between the useful layer (10) and the support substrate (30). The invention also relates to a method for manufacturing the structure (100).

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