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(54) **SEMICONDUCTOR DEVICE AND THE  
MANUFACTURING METHOD THEREOF**

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(57) **ABSTRACT**

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A semiconductor device includes a substrate, a plurality of first epitaxial structures, a second epitaxial structure and a plurality of gate structures. The substrate includes a STI, a plurality of first recesses, a plurality of convex portions and a second recess adjacent to the STI. One of the convex portions is located between the second recess and the first recess that is closest to the STI, and each of the other convex portions is located between the two adjacent first recesses, in which the second recess is deeper than the first recesses. The first epitaxial structures are located in the first recesses of the substrate respectively. The second epitaxial structure is located in the second recess, in which a volume of the second epitaxial structure is greater than a volume of the first epitaxial structure. The gate structures are located on the convex portions of the substrate respectively.

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