

Sensitivity Improvement in SGOI Biosensor by Varying Structure and
Oxidation

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Abstract

the improvement of sensitivity of SiGe nanowire biosensor could be realized by structural and oxidation effect. The transition current in thin and high transition mobility SiGe layer can be condensed by a-Si/SiGe stacked structure. The Ge fraction of the stacked nanowires with oxidation treatment could be increased, resulting from accumulation of Ge at the nanowire' s surface.

Keyword : biosensor