

The a-Si/SiGe core/shell nano-wire as highly sensitive bio-sensor

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Abstract

The effect of the a-Si/SiGe core/shell structure on improvement of the sensitivity of nano-wire bio-sensor has been investigated. In summary, the core region with a-Si of 400Å for Si_{0.86}Ge_{0.14} shell could achieve the best sensitivity performance of nano-wire by oxidation.

Keyword : biosensor