

Oxidation study of Ge Condensation on SGOI Nanowire Biosensor Fabrication
Kow-Ming Chang, Chu-Feng Chen, 賴瓊惠, Chin-Ning Wu, Cheng-Ting Hsieh, Yu-Bin
Wang, Chung-Hsien Liu
Electronics Engineering
Engineering
chlai@chu.edu.tw

Abstract

Oxidation ambient, oxidation time and nanowire structure were investigated. Oxidation temperature was fixed at 950oC to prevent undesirable consequence if inappropriate lower or higher of temperature during Ge condensation. The oxidation time is 3min and oxidation ambient is O₂ mixed 13% N₂ has maximum sensitivity improvement.

Keyword : SGOI, biosensor, sensitivity