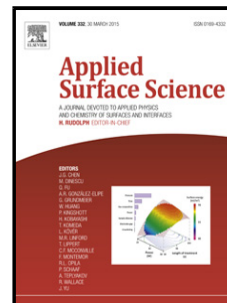


## Accepted Manuscript

Title: Influence of growth and annealing temperature on the strain and surface morphology of  $\text{Ge}_{99.5}\text{Sn}_{0.005}$  epilayer

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- $\text{Ge}_{0.995}\text{Sn}_{0.005}$  alloys were grown on Si (100) by MBE at 220~500 °C.
- Surface roughening was enhanced with the increase of growth temperature.
- Non-monotonic temperature dependence of the surface roughening was observed.
- The incorporation of Sn into Ge helped release the residual heteroepitaxial strain.
- The influence of annealing temperature on  $\text{Ge}_{0.995}\text{Sn}_{0.005}$  was also investigated.

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