

ELASTIC STRAINS IN SiGe HETEROSTRUCTURES WITH NON-UNIFORM QUANTUM DOTS

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S u m m a r y

Elastic strain distributions in SiGe heterostructures with quantum dots have been simulated with the use of the finite element method. The effect of a non-uniform germanium distribution in the nanoislands on the spatial dependence and the magnitude of elastic fields was studied. It is shown that quantum dots with a uniform component content are more strained in comparison with non-uniform nanoislands.