

OSTWALD RIPENING IN HETEROSTRUCTURES  
WITH QUANTUM DOTS UNDER DISLOCATION-  
SURFACE DIFFUSION

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S u m m a r y

The size distribution function of islands for semiconductor heterostructures is calculated within the framework of the mechanism of Ostwald ripening (OR) under the condition that islands grow at the expense of dislocation-surface diffusion. It is shown that, as regards the root-mean-square deviations of the calculated curves, the proposed mechanism of island growth corresponds to a number of the experimentally determined arrays of quantum dots (QDs) in a Ge/Si(001) heterostructure.