

ELECTRON IN TWO CONNECTED  
NANOHETEROCRYSTALS OF CUBIC FORM

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S u m m a r y

The results of research of the energy electron spectrum for two connected QD of cubic form are presented depending on the distance between them. The splitting of energy levels as a function of the size of a nanocrystal for the ground and first excited states is investigated. The genesis of the energy spectra of two nanocrystals of different sizes which depends on the distance between interfaces is studied. The stay probability of a particle for the given nanoheterosystem is found and the plots of probability are constructed. The comparative analysis of the interaction of two QD made of different materials is carried out:  $\beta$ -HgS/CdS and InAs/GaAs.