

INFLUENCE OF THE SHAPE OF A STRAINED
InAs/GaAs QUANTUM DOT ON THE ENERGY
OF ITS MAIN OPTICAL TRANSITION

R.M. Peleshchak, O.O. Dan'kiv

Ivan Franko Drohobych State Pedagogical University
(24, Ivan Franko Str., Drohobych 82100, Ukraine;
e-mail: peleshchak@rambler.ru)

S u m m a r y

It has been found that the energy of the main optical transition in strained InAs/GaAs quantum dots (QDs) with the radius $R_0 = 20 \div 32 \text{ \AA}$ is lower for cylindrical QDs than that for spherical ones. If $R_0 > 32 \text{ \AA}$, the inverse effect is observed.