

### TRANSMISSION ELECTRON MICROSCOPY OF In(Ga)As QUANTUM DOT STRUCTURES

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*Received July 31, 2003; Published September 1, 2003*

#### ABSTRACT

The application of transmission electron microscopy (TEM) to the investigation of In(Ga)As quantum dot (QD) structures grown on GaAs substrates is reviewed. Using various examples of the QD structures the advantages of using TEM for the analysis of QDs are presented. From plan-view TEM images the areal density of dots can be determined in real structures where QDs are embedded in the structure. Cross-sectional TEM images inform us about the real geometry of the structure, the shape, width and height as well as the distribution of QDs. It is especially useful for the investigations of multilayer QD structures.