A method for determining refractive indices of epilayers of multi-structure active layer

GAGIK SHMAVONYAN, State Engineering University of Armenia — The refractive indices of bulk and epitaxially grown materials differ. Besides, it is very difficult to experimentally determine and theoretically calculate the refractive indices of compound semiconductor epitaxial layers of quantum heterostructures, especially the refractive indices of active layer of multilayer compound semiconductor devices. For that reason the precise determination of the refractive indices of epilayers is actual. A new method for the determination of the refractive indices of epitaxially grown compound semiconductor materials of multilayer heterostructure is suggested. This method is a combination of experimental measurements and theoretical calculations. The equipment for the fulfillment of the suggested method is also elaborated.