

Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

**A Method for Determining Refractive Indices of Compound
Materials of Epilayers of Multilayer Quantum Structure¹** GAGIK

SHMAVONYAN, State Engineering University of Armenia — A method of determining the refractive indices of compound materials of epilayers of multilayer quantum structures of optoelectronic devices has been suggested. The difficulty with the determination of the refractive indices of the above-mentioned epilayers is that the exactness of the determination of the same parameters of compound materials of epilayers is not high as their values obtained by various methods are quite different. Therefore, the difference between values of bulk and epitaxially grown materials is great. For that reason beam profiles of light emitted from multilayer quantum structure of optoelectronic devices are experimentally investigated and theoretically calculated. The latter allows us to determine the refractive indices of compound epilayers of multilayer active layer of nanostructured optoelectronic devices. As this method consists in the confrontation of theoretical calculations and experimental results, it allows to precisely determine the refractive indices of compound epilayers.

¹Athor thanks NATO for FEL.RIG980772 grant.

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Date submitted: 16 Nov 2008

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