

Study of the Energy Levels in the Structure of the Laser Diode GaInP

Authors : Abdelali Laid, Abid Hamza, Zeroukhi Houari, Sayah Naimi

Abstract : This work relates to the study of the energy levels and the optimization of the Parameter intrinsic (a number of wells and their widths, width of barrier of potential, index of refraction etc.) and extrinsic (temperature, pressure) in the Structure laser diode containing the structure GaInP. The methods of calculation used; - method of the empirical pseudo potential to determine the electronic structures of bands, - graphic method for optimization. The found results are in concord with those of the experiment and the theory.

Keywords : semi-conductor, GaInP/AlGaInP, pseudopotential, energy, alliages

Conference Title : ICEECE 2015 : International Conference on Energy, Environmental and Chemical Engineering

Conference Location : Paris, France

Conference Dates : October 29-30, 2015