

Characterization of InGaAsP/InP Quantum Well Lasers

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Abstract : Analytical formula for the optical gain based on a simple parabolic-band by introducing theoretical expressions for the quantized energy is presented. The model used in this treatment take into account the effects of intraband relaxation. It is shown, as a result, that the gain for the TE mode is larger than that for TM mode and the presence of acceptor impurity increase the peak gain.

Keywords : InGaAsP, laser, quantum well, semiconductor

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