





A quarterly of the Institute of Physics, Wroclaw University of Technology

SEARCH Advanced search

About Optica Applicata

Current issue

Browse archives

Search

Editorial Board

Instructions for Authors

Ordering

Contact us

Optica Applicata 2005(Vol.35), No.3, pp. 651-654

Envelope function description of quantum cascade laser electronic states

Michal WASIAK, Maciej BUGAJSKI, WIodzimierz NAKWASKI

Keywords

quantum cascade lasers, electronic structure

Abstract

In this paper, we present a natural method of finding wavefunctions and energy levels in quantum cascade lasers. The envelope function approximation has been successfully used for modelling electronic structure in conventional semiconductor lasers. Although calculations in the case of polarized potential are more complicated than in nonpolarized wells, it is still possible to obtain quickly reliable results.



206.1 kB

Back to list

