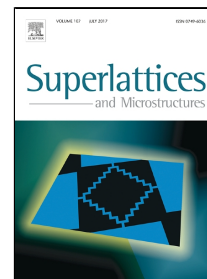


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Calculation of Band Structure and Optical Gain of Type-II GaSbBi/GaAs Quantum Wells Using 14-Band k·p Hamiltonian

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Highlights:

- Band structure of GaSbBi/GaAs quantum wells (QWs) calculated.
- Generation of strain splits LH and HH sub bands
- GaSbBi/GaAs QDs exhibit indirect gap type-II band alignment
- Optical gain of GaSbBi/GaAs (QWs) depends on width of the well
- Peak of the gain curve exhibits a shift towards lower wavelengths

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