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Title
Modifications of laser field assisted intersubband transitions in the coupled quantum wells due to static electric field
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Abstract

We consider the electron bound in the conduction band of a coupled asymmetric double quantum well (ADQW) interacting with static as well as strong monochromatic field in terahertz (THz) region. We use non-perturbative Floquet theory to study the static field and quantum well (QW) system in the presence of strong laser fields. We show that the intersubband dynamics gets modified due to the static field. The sensitivity to the ratio of strengths of static and laser field (Es/E0) of the state populations can be used in various optoelectronic device applications.(42 References).