460. Title:InGaAs quantum dots embedded in DBR-coupled double cavity
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Abstract:Self-assembled InGaAs quantum dots (QDs) embedded in coupled double-cavity

Abstract:Self-assembled InGaAs quantum dots (QDs) embedded in coupled double-cavity structures with an AlAs/GaAs intermediate distributed Bragg reflector (DBR) were grown on GaAs substrates. Two emission peaks from the QDs corresponding to the coupled double-cavity resonant modes were observed in the high reflection band. The frequency differences for the two resonant coupled modes are of terahertz, and have been successfully controlled by changing the AlAs/GaAs pair numbers for the intermediate DBR. The structures will be potentially useful for the device applications in compact terahertz emission at room temperature.