

Femtosecond coherent spectroscopy of four-wave mixing and the spectroscopy of transient gratings in GaAs/AlGaAs semiconductor heterostructures at room temperature

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Abstract

Results from femtosecond coherent spectroscopy of four-wave mixing in GaAs/AlGaAs semiconductor heterostructures at room temperature are presented. Electron diffusivities and their spins are found via spectroscopy of transient gratings. Investigations in the field of spin transport in GaAs/AlGaAs heterostructures are performed with the aim of their possible use in spintronics applications. © 2014 Allerton Press, Inc.

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