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Title:Efficiency of generation of terahertz radiation in GaAs, InAs, and InSb crystals

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Abstract:Pulsed generation of terahertz radiation in GaAs, InAs, and InSb semiconductors under the action of femtosecond laser radiation at the wavelength of 775 nm is studied. The generation efficiency is shown to increase by a factor of 2.7 if InAs is placed into a magnetic field of 0.8 T. An increase in the generation efficiency by the mechanism of optical rectification in InAs samples with the <111> orientation is demonstrated.

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