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## AC Conductivity Properties of GaTe Layer Crystals

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### Abstract

Bulk crystals of GaTe were grown using the modified Bridgman techniques. The phase formation was confirmed by XRD-studies. The lattice parameters, crystallite size and nmicrostrain of the GaTe crystals were determined. The crystallize size suggests that GaTe film is a nanomaterial. The dependence of ac conductivity on temperature and frequency was studied on the ranges 295 k to 545 k and 200 Hz to 76 KHz respectively. AC conductivity measurements suggest that the conduction mechanism of the GaTe sample is controlled via a thermally activated process from different localized states in the gap or its tails.

### Keywords

**Author Keywords:** [Bridgman Technique](#); [Microstructure](#); [Layered Crystals](#); [AC Conductivity](#)

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