

## Anisotropy of magnetic susceptibility of $\text{TiS}_3$

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### Abstract

Titanium trisulfide crystals of sufficient size for anisotropy of magnetic susceptibility measurement have been grown. Morphology and defect structure of the crystals have been studied by transmission electron microscopy. Magnetic susceptibility of the crystals have been studied along the main crystallographic axes at the temperature range 300-4 K. Magnetic susceptibility is diamagnetic in all directions. The value of the magnetic susceptibility corresponds with the anisotropy of the conductivity and may be caused by the contribution of free charge carriers.