74. Study on optical properties of Cd doped ZTS single crystals

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ABSTRACT

The optical properties; UV-Visible and photoluminescence of the Cd doped Zinc Tris (Thiourea) Sulphate (ZTS) single crystals grown from solution at low temperature by slow evaporation of solvent method using water as solvent have been studied. The optical transparency of grown crystals was measured over 190-1083nm wavelength range. It is found that the grown crystals have good transparency within the wavelength range 285-1083nm and increases with concentration of Cd. The photoluminescence study shows increase in the luminescence intensity with concentration.

Keywords: Solution growth; ZTS; NLO crystals; Photoluminescence.