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## OPTICAL PROPERTIES OF THIN FILMS OF COPPER TELLURIDES

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### ABSTRACT

Copper telluride thin films have been prepared on different substrates using an electrodeposition technique. Stylus profilometry has been carried out to find out thickness value of the deposited films. X-ray diffraction analysis revealed that the prepared films possess polycrystalline in nature. Film composition with surface morphology has been analyzed using an energy dispersive analysis by X-rays and scanning electron microscopy. Optical absorption analysis showed that the prepared films possess band gap value in the range between 2.02 and 2.26 eV. Value of refractive index, extinction coefficient, real and imaginary dielectric constants are estimated for films obtained on transparent substrates.



### Keywords:

Optical Properties,  
Thin Films,  
Copper Tellurides