



Optica Applicata 2005(Vol.35), No.2, pp. 209-214

## Optical characterization of an amorphous organic thin film

Fahrettin YAKUPHANOGLU, Memet SEKERCI

SEARCH

[Advanced search](#)

Keywords

thin film, optical constants, optical band gap

Abstract

The optical characteristics of Co(II) complex having 5,6-O-cyclohexylidene-1-amino-3-azahexane thin film were investigated by spectrometric measurements. The optical parameters, optical band gap  $E_g$  and width of localized states  $E_o$  of the film were determined using the transmittance  $T$  and the reflectance  $R$  at normal incidence in the spectral range 540–660 nm. The absorption edge of the film exhibits the exponential behavior which is attributed to the electronic transition in the localized states tailed off in the indirect energy band gap of the film. The refractive index spectra of the film show normal dispersion up to about 2 eV and afterwards, the refractive index increases with increasing photon energy.



115.5 kB

[Back to list](#)

© Copyright 2007 T.Przerwa-Tetmajer All Rights Reserved 2007

**stat4u**



About Optica Applicata

Current issue

Browse archives

Search

Editorial Board

Instructions for Authors

Ordering

Contact us