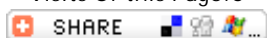




- > MainPage
- > About College
- > Files
- > Researches
- > Courses
- > Favorite Links
- > Our Contacts

Visits Of this Page:6



Research Details :

Research Title : *Optical properties of thermally evaporated tin-phthalocyanine dichloride thin films, SnPcCl₂*
Optical properties of thermally evaporated tin-phthalocyanine dichloride thin films, SnPcCl₂

Descriptipn : The optical properties of tin-phthalocyanine dichloride thin films have been studied. The films used in the characterisation studies were thermally evaporated. The spectral and optical parameters have been investigated using spectrophotometric measurements of transmittance and reflectance in the wavelength range 200-2100 nm. The absorption spectra recorded in UV-VIS region for the as-deposited and annealed samples showed two absorption bands, namely the Q- and Soret band. No remarkable effect was observed after annealing. A structure with energy separation of magnitude 0.2 eV is seen on the Q- and Soret bands. A transition involving d-electrons of the central metal atom was indicated in the high photon energy region. The dispersion curve of the refractive index showed an anomalous dispersion in the absorption region and a normal one in the transparent region. The band-model theory was applied to determine the optical parameters. The fundamental and the onset of the indirect energy gaps were determined to be 2.79 and 1.51 eV respectively. (C) 2003 Elsevier B.V. All rights reserved.

Research Type : Article

Research Year : 2004

Publisher : PHYSICA B-CONDENSED MATTER Volume: 344 Issue: 1-4 Pages: 398-406

Added Date : Saturday, June 14, 2008

Researchers :

Researcher Name (Arabic)	Researcher Name (English)	Researcher Type	Degree	Email
.	El-Nahass MM	Researcher	.	.
.	Abd-El-Rahman KF	Researcher	.	.
أحمد عبد الله الغامدي	Al-Ghamdi AA	Researcher	أستاذ	.
عبد الله عسيري	Asiri AM	Researcher	.	.

Attatchments :

File Name	Type	Description
-----------	------	-------------