

## عنوان مقاله:

optical analysis of Co-doped SnO<sub>2</sub> nanostructured thin films by using spectroscopic ellipsometry technique

## محل انتشار:

دومین کنفرانس بین المللی فناوری های نوین در علوم (سال: 1397)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

Optical properties of sol-gel spin coated Co-doped SnO<sub>2</sub> thin film deposited on the glass substrate was investigated by using spectroscopic ellipsometry (SE) technique. SE measurements are done at three various incidence angles of light including 67.5°, 70° and 72.5°. Influences of the incidence angle of light emitted by SE device on optical constants including the reflectance, refractive index, extinction and absorption coefficients were studied. By absorption coefficient values obtained from SE measurements and using Tauc equation, we determined the band gap energy values. Results showed the increase of incidence angle of light from 67.5° to 72.5° leads to decrease of the bandgap energy from 3.5 to 3.4 eV.

## کلمات کلیدی:

sol-gel, spin coating, spectroscopic ellipsometry, co-doped SnO<sub>2</sub>, incidence angle, band gap energy

## لینک ثابت مقاله در پایگاه سیویلیکا:

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