

## عنوان مقاله:

Influence of Nd<sup>3+</sup> ions on TL characteristics of Li<sub>2</sub>O-MO-B<sub>2</sub>O<sub>3</sub> (MO = ZnO, CaO, CdO) glass system

## محل انتشار:

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## خلاصه مقاله:

Thermoluminescence (TL) characteristics of X-ray irradiated pure and doped with Nd(3+) ions glasses have been studied in the temperature range 303–573 K; all the pure glasses have exhibited single TL peak at 382, 424 and 466 K, respectively. When these glasses are doped with Nd(3+) ions no additional peaks are observed but the glow peak temperature of the existing glow peak shifted gradually towards higher temperatures with gain in intensity of TL light output. The area under the glow curve is found to be maximum for Nd(3+)-doped glasses mixed with cadmium oxide as modifier. The trap depth parameters associated with the observed TL peaks have been evaluated using Chen's formulae. The possible use of these glasses in radiation dosimetry has been described. The result clearly showed that neodymium (Nd)-doped cadmium borate glass has a potential to be considered as the thermoluminescence dosimeter.

## کلمات کلیدی:

Infra red spectra Thermoluminescence Borate glasses Neodymium

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/763589>

