Turkish Journal of Physics

Turkish Journal

The Effect of Various Experimental Parameters on Glow Peaks and Trapping Parameters of CaF₂:Dy (TLD-200) Crystals

of

Physics

A. Necmeddin YAZICI, M. Yakup HACIİBRAHİMOĞLU and

Metin BEDİR

University of Gaziantep, Faculty of Engineering,
Department of Engineering Physics,
27310 Gaziantep-TURKEY

Keywords Authors

Abstract: In the present study, thermoluminescence glow curves of CaF₂:Dy (TLD-200) crystals have been investigated in detail between the temperature region 300-550 K. The number of peaks and their trapping parameters (E, s and b) have been determined using the computerized glow curve fitting, peak shape and isothermal decay methods. In addition, the effect of storage times at room temperature, dose levels and heating rates on the trapping parameters have been investigated in detail by using

computerized glow curve deconvolution method (CGCD) using first and general order kinetic equations.



phys@tubitak.gov.tr

Scientific Journals Home
Page

Turk. J. Phys., 24, (2000), 623-649.

Full text: pdf

Other articles published in the same issue: Turk. J. Phys., vol. 24, iss. 5.