

# The effect of ZnO on the kinetic parameters of thermoluminescence window glass exposed to photon irradiation

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The present reports the preparation of ZnO doped commercial Thai transparent window glass provided by Gardian Industries Corp. (denoted as WG). The effects of variable concentration of ZnO on thermoluminescence (TL) behavior are studied. The samples were prepared by using the melt quenching technique. The glasses were cut into transparent chips and exposed to X-ray. Trapping parameters are calculated by glow curve shape method for every recorded glow curve. The glow curve structure, order of kinetics and activation energy are related to the concentration of the Zn-doped material. The concentration at 1.000 mol% of ZnO capable of reducing two peak glow curve of the window glass to a single peak.

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