

THERMALLY STIMULATED LUMINESCENCE
IN CERAMICS $\text{Bi}_4\text{X}_3\text{O}_{12}$ ($\text{X} = \text{Si}, \text{Ge}$)

O. M. Bordun

I. Franko Lviv State University, Faculty of Physics
(50, Dragomanov Str., Lviv 79005, Ukraine)

S u m m a r y

Thermally stimulated luminescence (TSL) of ceramics $\text{Bi}_4\text{X}_3\text{O}_{12}$ ($\text{X} = \text{Si}, \text{Ge}$) under X-ray excitation in the temperature region 80 - 400 K is studied. An analysis of forms of TSL curves infers. That the recombination processes in peaks of TSL at 149 and 212 K in $\text{Bi}_4\text{Si}_3\text{O}_{12}$ ceramics and at 143 and 230 K in $\text{Bi}_4\text{Ge}_3\text{O}_{12}$ ceramics can be described by the linear kinetics. The spectral composition of TSL of ceramics is investigated, and the activation energy and frequency factor which corresponds to TSL maxima are determined by various methods.