

VARIATIONS OF PHYSICAL PROPERTIES OF NEUTRON-IRRADIATED QUARTZ

I.Kh. Abdukadyrova

Institute of Nuclear Physics,
Uzbekistan Acad. Sci.
(*Ulugbek, Tashkent 702132, Uzbekistan*)

S u m m a r y

Radiation influence on the ensemble of physical properties (absorption, luminescence, and structural ones) of crystalline quartz has been investigated. The nonmonotone radiation kinetics of some optical and X-ray diffraction parameters in the regions of radiation-induced phase transition (PT) is established. A possible mechanism of crystal structure transformation under irradiation is discussed.