Investigation of silica-based TL media for diagnostic x-ray dosimetry

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Abstract

We examine the development of Co-doped SrSO4 thermoluminescent dosimeter with sensitivity superior to that of the LiF (TLD-100) phosphor popularly used in medical dosimetry. The novel system is tailored for detection of energy range between 10 MeV up to 10 keV (X-ray). The results show that the Co-doped SrSO4 phosphor has potential to be employed in medical dosimetry applications.

Keywords: SrSO4, Co-doped, X-ray, Dosimetry, Thermoluminescence, Medical Imaging.

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