

عنوان مقاله:

Investigation of LiF, Mg and Ti (TLD-۱۰۰) Reproducibility

محل انتشار:

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خلاصه مقاله:

LiF, Mg and Ti cubical TLD chips (known as TLD-۱۰۰) are widely used for dosimetry purposes. The repeatability of TL dosimetry is investigated by exposing them to doses of (۸۱, ۱۶۲ and ۴۰.۵ mGy) with ۶۶۲keV photons of Cs-۱۳۷. A group of ۴۰ cubical TLD chips was randomly selected from a batch and the values of Element Correction Coefficient (ECC) were obtained ۴ times by irradiating them to doses of ۸۱ mGy (two times), ۱۶۲mGy and ۴۰.۵mGy. Results of this study indicate that the average reproducibility of ECC calculation for ۴۰ TLDs is ۱.۵%, while these values for all chips do not exceed ۵%.

کلمات کلیدی:

LiF, Mg, and Ti, TLD-۱۰۰, ECC, Reproducibility

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