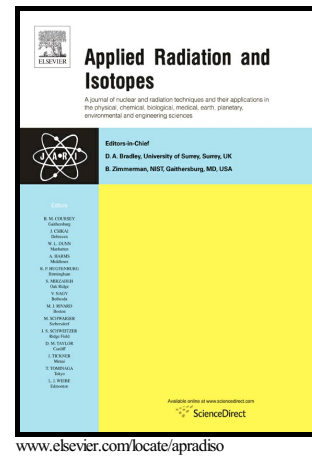


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Measurement of basic characteristics of scintillation-type radiation survey meters with multi-pixel photon counter

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Abstract

The basic characteristics of three low-cost radiation survey meters using multi-pixel photon counters (MPPC), the C12137, T-GMK2-S, and iMetry, were measured. The linearity of the dose rate was confirmed over the full range of each instrument. All the survey meters could obtain gamma-ray energy spectra, with an accuracy within $\pm 30\%$ of the theoretical value. These survey meters are therefore applicable for radiation management.

Keywords: multi-pixel photon counter, scintillation survey meter, ambient dose equivalent, energy spectrum

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