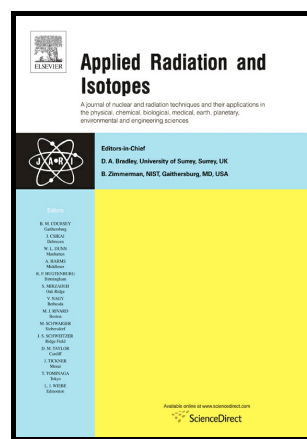


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Preliminary study of the applicability of the thin gap method on alpha emitters

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Abstract

The thin gap method as an in-situ radiotracer technique is widely used. This study investigated the applicability of alpha emitters. PIPS and CsI alpha spectrometers were applied in a thin gap cell. A suitable ^{210}Po source was prepared by spontaneous deposition, Mylar foil was used to simulate water. A maximum intensity decrement of 7% within 25 microns was observed. Even though this method is suitable for the study of surface phenomena, further investigation is necessary e.g. into water and heat sensitivity.

Keywords

in situ, thin gap, radiotracer method, alpha emitters, ^{210}Po source

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