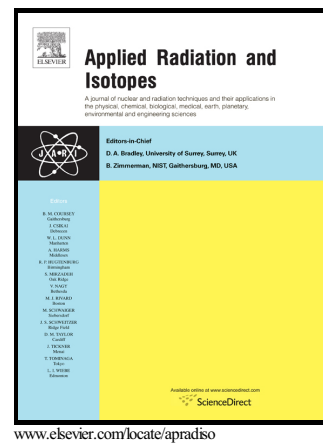


# Author's Accepted Manuscript

## Induced Radioisotopes In A Linac Treatment Hall

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# INDUCED RADIOISOTOPES IN A LINAC TREATMENT HALL

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Abstract

When linacs operate above 8 MV an undesirable neutron field is produced whose spectrum has three main components: the direct spectrum due to those neutrons leaking out from the linac head, the scattered spectrum due to neutrons produced in the head that collides with the nuclei in the head losing energy and the third spectrum due to room-return effect. This last are mainly epithermal and thermal neutrons being constant at any location in the treatment hall. These neutrons induce

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