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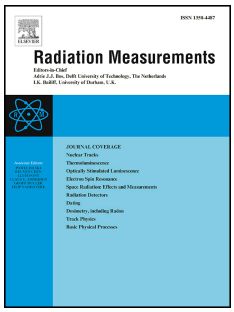

Radiophotoluminescence in Sm-doped BaF_2-Al_2O_3-B_2O_3 glass-ceramics

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Radiophotoluminescence in Sm-doped BaF_2-Al_2O_3-B_2O_3 glass-ceramics

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Abstract: In this research we have found that Sm-doped BaF_2-Al_2O_3-B_2O_3 glass ceramics show radio-photoluminescence (RPL) properties associated with X-ray irradiation. Before X-ray irradiation, the photoluminescence (PL) emission is only due to the 4f-4f transitions of Sm^{3+} observed around 600 nm; however, after X-ray irradiation it shows additional PL emissions due