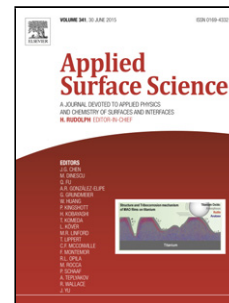


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Structural and magnetic properties of zinc ferrite thin films irradiated by 90 keV neon ions

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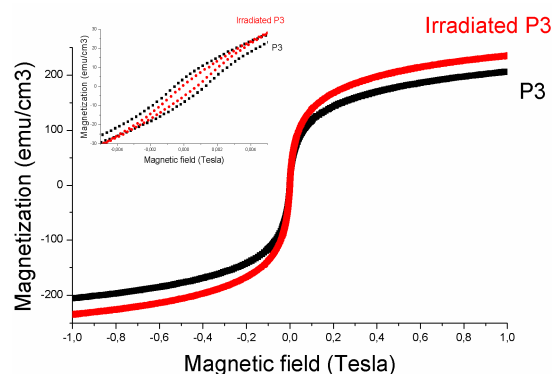
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Graphical abstract



Highlights

- Effect of different ion beam fluences on zinc ferrite thin films structure was investigated
- First reported results on zinc ferrite thin films irradiated with slow highly charged ions
- Increased magnetization was observed for samples irradiated even at low fluence
- Measurements of blocking temperature of thin films before and after irradiation

Abstract

The effects of 90 keV neon beam irradiation on the structure and magnetic properties of zinc ferrite thin films have been investigated through several methods, namely, X-ray diffraction technique, Vibrating Sample and SQUID magnetometers. Beforehand, the pristine have also been characterized using profilometry and microscopy techniques. In particular single-phase formation of the thin films

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