

**STUDIES OF PHOTOINDUCED CHANGES IN MODULATED  
MAGNETIC STRUCTURE PARAMETERS**

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**ABSTRACT**

*This article is devoted to the study of the dependence of the magnetically linear birefringence in a FeBO<sub>3</sub>: Mg crystal on the orientation of the antiferromagnetic moment. The emergence of a magnetically modulated structure (MMS) in a crystal doped with an FeBO<sub>3</sub> impurity was studied by the magneto-optical method. The studies were carried out in the temperature range  $80 \leq T \leq 290K$  in a magnetic field  $H \leq 50$  Oe with the orientation of the vector  $H$  parallel to the (111) plane. Illumination with a light flux and visual observations of the domain structure (DS) and measurements of the Faraday effect were carried out.*

**KEYWORDS:** *Domain Structure, Modulated Magnetic Structure, Magnetic Linear Birefringence, Crystal, Domain, Magnetic Moment, Axis Of Magnetization, Illumination, Orientation Of Domains, Anisotropy.*

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