

# Anisotropy of $g_{\text{eff}}$ for $\text{Ni}_{50}\text{Mn}_{35.5}\text{In}_{14.5}$ Heusler alloy

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## ABSTRACT

Heusler alloys Ni-Mn-X (X=Ga, Sb, Sn, In) have become attractive group of materials due to their properties: semi-metallic, giant magnetocaloric effect (giant MCE), ferromagnetic shape memory effect (FSM). They also have potential practical use in many different fields e.g. spintronics, ecological refrigeration. The properties of Heusler alloys could be changed by the stoichiometry, temperature and magnetic field variation.

In this work electron magnetic resonance (EMR) spectra of non-stoichiometric  $\text{Ni}_{50}\text{Mn}_{35.5}\text{In}_{14.5}$  Heusler alloy ribbons obtained by melt-spinning method [1] were measured. The EMR measurements were performed on the X-band (9.36GHz) spectrometer (Bruker ELEXSYS E580). Angle dependences were registered for three orientations of sample, with the use of uniaxial goniometer at room temperature. The results exhibited magnetic anisotropy and were used for calculating the principal values of  $g_{\text{eff}}$  tensor.

## References

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