

## Magnetocrystalline anisotropy of Ni-Mn-Ga-Co-Cu tetragonal martensite

The martensites of Heusler alloys based on Ni-Mn-Ga exhibit magnetically induced reorientation resulting in giant field induced strain up to 12 % in Ni-Mn-Ga-Co-Cu with 4 at.% of Co and Cu. As the driving force of the phenomenon is the magnetocrystalline anisotropy (MCA), we studied the evolution of MCA in different tetragonal single crystalline Ni-Mn-Ga-Co-Cu and compared with pure Ni-Mn-Ga. The MCA of martensite was determined from magnetic hysteresis loops. No clear trends were observed.

**Primary authors:** Mr RAMEŠ, Michal (Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague, Prague, CZ-115 19, Czech Republic); Mr HECZKO, Oleg (Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague); Mr STRAKA, Ladislav (FZU – Institute of Physics CAS, Prague, CZ-182 21, Czech Republic); Dr SOZINOV, Oleksii (LUT University, Lappeenranta)