

Andreev reflexion spectroscopy study of spin polarization in $\text{Co}_2\text{Cr}(\text{Fe})\text{Al}$ Heusler alloys

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The large class of Heusler compounds offer many potential applications. One of the most promising application is in spintronics as some Heusler alloys exhibit high spin polarization. The typical example of a such Heusler half-metal is Co_2CrAl [1]. In the present contribution the influence of Fe on the spin polarization of Co_2CrAl will be studied. A recently successfully introduced new rapid quenching method have been used for the sample preparation [2]. The spin polarization parameter P of each sample has been determined from Point-contact Andreev reflexion spectra [3], measured on different microconstrictions between a superconducting Nb tip and $\text{Co}_2\text{Cr}(\text{Fe})\text{Al}$ sample.

References:

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