

# MAGNETIC ANISOTROPY OF Co/MgO FILM WITH Au INTERFACE

L. Gladczuk, P. Aleshkevych, A. Petrouchik and P. Przyslupski

Institute of Physics, Polish Academy of Sciences, Al. Lotnikow 32/46, 02-668 Warsaw, Poland

Recently, there was a lot of interest in Co/MgO/Co magnetic tunnel junctions with in-plane magnetic moments of Co electrodes. Fabrication of such heterostructure with electrodes having perpendicular anisotropy offers an extended functionality of the tunnel junction. In the present study, a Co/MgO heterostructure was deposited with Au interlayer partially covering Co electrode. The heterostructure, including a 0-3 nm Co wedge-shaped layer, was deposited by means of molecular beam epitaxy on sapphire substrate, and characterized by ferromagnetic resonance. The experiments indicate an enhancement of anisotropy for heterostructures with specific Co thickness of electrodes. A comparison of the obtained results with earlier data on Co anisotropy will be presented.

9.7 cm

13.4 cm

## Subject category :

5. Nano-structure, Surfaces, and Interfaces

## Presentation mode :

poster

## Corresponding author :

Leszek Gladczuk

## Address for correspondence :

Institute of Physics Polish Academy of Sciences  
Al. Lotnikow 32/46 02-668 Warsaw, Poland

## Email address :

gladl@ifpan.edu.pl