Contribution ID: 163

Type: Poster

FEATURES OF SPIN-POLARIZED CURRENT INJECTION IN HETEROSTRUCTURES MoRe/Co2CrAl-I-Pb

Contact Phone

Abstract

We fabricated multilayer S1/F-I-S2 type tunnel heterostructures MoRe/Co2CrAl-I-Pb and studied their currentvoltage characteristics at the 4.2 K. The study of tunnel current between Co2CrAl and Pb electrodes has shown that singlet Cooper pairs can be converted into triplet Cooper pairs. When the thickness of Co2CrAl spacer is 100 nm may be "shunting effect" of the spin-polarized current injection through the tunnel barrier. Spinpolarized tunnel current injection is possible when the thickness of Co2CrAl spacer is 200 nm.

Type of Book of Abstracts

Primary author: Prof. RUDENKO, Eduard (G.V. Kurdyumov Institute for Metal Physics)

Co-authors: Dr KOROTASH, Igor (G.V. Kurdyumov Institute for Metal Physics); Dr KRAKOVNY, Anatolij (G.V. Kurdyumov Institute for Metal Physics); DYAKIN, Maxim (G.V. Kurdyumov Institute for Metal Physics)

Presenter: Prof. RUDENKO, Eduard (G.V. Kurdyumov Institute for Metal Physics)

Session Classification: Surface Physics, Nano- and Microelectronics

Track Classification: Surface Physics, Nano- and Microelectronics