Study of the Magnetization Reversal Behavior of exchange-Biased System Using Polarized Neutron Reflectometry

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Since the first discovery of exchange anisotropy on Co/CoO system[1], there have been numerous studies to explore the physical origin of exchange-biased system[2,3]. In this presentation, we report that how the polarized neutron reflectomery can be applied to study the magnetization reversal behavior of the exchange biased system. As an example, the detailed magnetization reversal mechanism of the exchange-biased Py(30 nm)/FeMn (0, 15, 30 nm)/CoFe(30 nm) trilayers was studied and found that the 15 nm antiferromagnetic FeMn layer mediates the magnetization reversal behaviors of both Py and CoFe layers through interlayer exchange bias coupling. We also update the current activities in polarized neutron reflectometer in HANARO.

참고문헌

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+This work is supported by NRF Nuclear R&D Program (2010-0018374 and 2011-0002273).