

Spin Wave Propagation through the System of two RKKY Coupled Ferromagnets

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The new possibility to introduce a controlled phase shift of the propagating spin-waves is in transmission through an ultrathin nonmagnetic metallic spacer separating two ferromagnets, with a thickness much less than the spin-wave wavelength. This allows controlling the phase of the spin-waves by means of application of external magnetic field. In the case of the two Co films, the change of the Cu spacer thickness by one monolayer may allow to introduce the change of the spin-wave phase.

We acknowledge the financial assistance from National Science Centre of Poland project UMO-2012/07/E/ST3/00538 and the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie No 644348 (MagIC).