

Anomalous Hall effect in Amorphous CoSiB/Pt/CoSiB sandwich structure

K.J. Min^{1*}, H.N. Lee¹, I.S. Park¹, S.W. Shin¹, H.J. Kim¹, T.W. Kim¹, J.H. Eom², H.Y. Noh^{2†}

¹Department of Advanced Materials Engineering, Sejong University, Seoul, 143-747, Korea

²Department of Physics, Sejong University, Seoul, 143-747, Korea

We have quantitatively investigated the Anomalous Hall effect (AHE) in amorphous CoSiB/Pt/CoSiB sandwich structure. The amorphous CoSiB/Pt/CoSiB sandwich structure were prepared by changing Pt thickness. The thickness of Pt were varied in the range of from 8 to 40 Å. The amorphous CoSiB/Pt/CoSiB sandwich structure exhibited large anomalous Hall resistivity (ρ_H) and Hall angle(ρ_H/ρ), which was larger than those of amorphous rare-transition metal alloys and normal transition metal alloys. The Hall resistivity in amorphous CoSiB/Pt/CoSiB sandwich structure decreased as the thickness of Pt increase.