

Tilting of the Spin Orientation Induced by Rashba Effect in Ferromagnetic Metal Layer

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We devised a new method to measure the virtual magnetic field induced by Rashba effect in ferromagnetic metal layer. Transverse Rashba magnetic field makes the magnetization direction tilted out of the easy axis, which could be detected by the changes in anomalous hall resistances. Through a specified measurement of the second harmonics of the hall resistance, the Rashba field could be obtained with high sensitivity even at low current regime. The results are compared with the prior reports based on the measurement of the transverse field required for the nucleation of reversed domain.

