

Anisotropies, exchange field and resonant frequency in FeCo-based ferromagnetic thin film

Prof. C K Ong, National University of Singapore

Isotropic magnetic materials with high resonant frequencies are useful for applications in microwave devices. In this talk, I shall discuss four routes to increase the resonant frequency of the thin film: one is based on exchange bias field in the ferromagnetic and antiferromagnetic multilayers; the second one is based on oblique deposition method; the third one is based on gradient composition deposition method; and the final one based on the exchange coupling between ferrimagnet and ferromagnet. The microwave and magnetometry measurements are presented to support our understanding.