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**Anisotropic ally Incident Effect of Sputtering Particles on the High Anisotropy Field of a CoFe Film in the Carrousel Sputtering Method** R. IMAIZUMI, M. MUNAKATA, Sojo University, M. OHKOSHI, Kyusyu Institute of Technology, K. MAKI, Sumitomo Metal Mining Co. Ltd, SHIN-ICHI AOQUI, Sojo University — Co-Fe magnetic thin film with a large in-plane uniaxial anisotropy field$H_k$ of more than several Oe has attractive potentiality for the GHz frequency use. It is reason why its higher anisotropy can bring the higher ferromagnetic resonance (FMR) frequency, which is essential for giving the higher driving frequency in the device for GHz frequency use. We have already identified that carousel type sputter technique gave such a large in-plane uniaxial anisotropy field in the Co-Fe magnetic thin film, however, its atomic deposition of the film was unexplained yet. In this study, the atomic deposition of the film was analyzed by using Monte Carlo simulation with respect to sputtered particles. It was found that these sputtered particles gave approximate cause of the higher uniaxial-magnetic anisotropy of the films.

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