

## MICROSTRUCTURE AND MAGNETIC PROPERTIES OF HIGH $M_s$ FERRITE/METAL COMPOSITE THIN FILMS

J. G. Na and \*C. S. Kim

Div. of Metals, Korea Institute of Science and Technology, Sungbuk, Seoul 136-791, Korea

\*Dept. of Physics, Kookmin University, Sungbuk, Seoul 136-702, Korea

**Abstract**—Metal/ferrite composite thin films were prepared by a reactive sputtering method to improve the saturation magnetization ( $M_s$ ). The  $M_s$  of the thin films increased with increasing the substrate temperature and this was attributed to the increase of the metal portion in the thin films. The Mossbauer result indicated that the ferrite phase in the thin films changed to hyperstoichiometric one with deposition of metal phase.