

Abstract Submitted
for the GEC07 Meeting of
The American Physical Society

Development of a novel Inductive coupled plasma source¹

HYONG-HO NAM, HYO-CHANG LEE, CHIN-WOOK CHUNG — To improve plasma uniformity, a three-turn cross antenna was developed. The three-turn cross antenna has low inductance and low antenna voltage. The antenna voltage is 227V at 100W(13.56MHz) and at argon 10 mTorr while it is 1200 V at a single turn antenna. Plasma density is $10^{11} \sim 10^{12} \text{cm}^{-3}$ in the range of 5mTorr to 20mTorr and 100W to 600W. Plasma azimuthal asymmetry is below 5%. This antenna is expected to be suitable for next generation plasma processing.

¹ICP three-turn antenna

Hyong-ho Nam

Date submitted: 15 Jun 2007

Electronic form version 1.4