

Abstract Submitted
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Electrical and plasma parameters of side type ferromagnetic ICP
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SEARCH LABORATORY COLLABORATION — A new class of plasma source for
uniform processing of large surfaces, ferromagnetic ICP is developed in this presen-
tation as an alternative to existing plasmas. This source has eight half square quartz
tubes at side wall and each tube has two toroidal ferromagnetic cores. Electrical
parameters are measured by an MKS impedance probe and plasma parameters are
obtained from single langmuir probe data. Operating pressure is in the range of
2 mtorr to 50 mtorr and input power driven at 400 kHz is delivered up to 2 kW.
Antenna voltage and current are less than 800 V and 6 A with high power factor
and plasma density profile over 300 mm wafer is uniform at various pressure.

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