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**Experimental investigation on the E to H transition in a dual frequency inductively coupled plasma (2MHz/13.56MHz)** JU-HO KIM, HO-WON LEE, CHIN-WOOK CHUNG, Department of Electrical Engineering, Hanyang University, South Korea — A transition from a capacitive mode to an inductive mode is investigated in a dual frequency inductively coupled plasma. The frequency powers of 13.56 MHz and 2 MHz are applied to the two antennas, respectively. The plasma density is measured using RF compensated Langmuir probe. The density jump due to the transition with increasing power is measured at 13.56 MHz and 2 MHz respectively, and compared to dual frequency operation. The characteristics in the transition can be explained by the absorbed power and the lost power with respect to the plasma density and driving frequency difference.

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