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Research on the mechanism of multiple inductively coupled plasma source for large area processing JANGJAE LEE, SIJUN KIM, Department of physics, Chungnam National University, DAEWOONG KIM, Department of Mechanical Engineering, Korea Advanced Institute of Science and Technology, KWANGKI KIM, YOUNGSEOK LEE, SHINJAE YOU¹, Department of physics, Chungnam National University — In the plasma processing, inductively coupled plasma having the high-density is often used for high productivity. In large area plasma processing, the plasma can be generated by using the multi-pole connected in parallel. However, in case of this, it is difficult for power to be transferred to plasma uniformly. To solve the problem, we studied the mechanism of inductively coupled plasma connected in parallel. By using the transformer model, the multiple ICP source is treated. We also studied about the change of the plasma parameters over the time through the power balance equation and particle balance equation.

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