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Neutral gas flow effect in a large area CCP plasma source TAESANG LEE, SEUNG-HOON PARK, HOYUL BAEK, YONGSEOK JHO, CHOONG-SEOCK CHANG, Korea Advanced Institute of Science and Technology / NewYork University — We modified XPDP2 code to include neutral gas flow effect on CCP discharge for argon gas. Parallelized multi-grid method is used for efficient field calculation. Particle simulation is used for gas flow calculation and spatially non uniform gas distribution is obtained. Ionization, charge exchange and neutral - neutral collision effect are considered for realistic neutral gas simulation. Multi-time scale simulation is used to get steady state discharge including gas depletion by ionization. Preliminary results are obtained and compared with the results from uniform background neutral gas distribution.

TaeSang Lee Korea Advanced Institute of Science and Technology

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