



1. Title:	Radiation Hydrodynamic Simulation for LPP EUV Sources
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3. Abstract body:

In order to estimate the extreme ultra-violet (EUV) emission from laser-produced plasmas, we have to calculate the plasma dynamics and x-ray transport in one- and two- dimensions. For this purpose, we have developed 1D and 2D radiation hydrodynamic codes for calculating EUV emission from laser-produced Tin plasmas, and applied them to the EUV emission. We have calculated with various laser-wavelength, intensity, and pulse duration to optimize the plasma conditions. Especially, for the long pulse duration or cylindrical target such as the Tin jet, where multi-dimensional plasma expansion is important, we calculate the EUV emission by 2D code. We will show comprehensive simulation results to give the realistic design of the plasma condition. Also, in order to confirm the accuracy of simulation results, we have compared simulation results with the experimental observations for EUV conversion efficiency (CE), x-ray spectrum, plasma density and temperature profiles. They are in good agreement entirely. However, we still have difference between them. We will discuss about detail physical modeling for these calculations.