

Abstract Submitted
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X-ray polarization spectroscopy for oblique laser incidence relevant to fast igniter research¹ Y. OKANO, Y. INUBUSHI, H. NISHIMURA, T. KAI, ILE, Osaka Univ., T. KAWAMURA, Tokyo Tech, D. BATANI, A. MORACE, R. REDAELLI, Univ. Milan, C. FOURMENT, J. SANTOS, G. MALKA, Univ. Bordeaux 1, A. BOSCHERON, A. CASNER, CEA, M. KOENIG, LULI, S. FUJIOKA, T. NAKAMURA, T. JOHZAKI, H. NAGATOMO, M. MIMA, ILE, Osaka Univ. — In a fast ignition study, x-ray polarization spectroscopy is known as one of the useful methods to investigate the velocity distribution function (VDF) of fast electrons in laser plasma, and anisotropy of the VDF has been observed experimentally in previous studies. In this study, we investigated the fast electron transport in intense-laser plasma under oblique incidence. The laser pulse (1 ps, 10 J) was focused onto a polyvinylchloride target at an angle of 67 degrees to the target normal at 10^{18} W/cm². It was clearly observed that the resultant Cl-He α lines for s- or p-polarized laser irradiation differed in polarization. In this presentation, the detail description of fast electron transport will be discussed along with the experimental results.

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