

エクストリームフォトンクスセミナー
Extreme Photonics Seminar

No. 11

Language: Japanese

Date : Jan.17(Thu), 2013, 15:00 ~ 16:00

Location : Cooperation Center, 5F Meeting Room, W524
(研究交流棟 5階会議室 W524)

Title : At-Wavelength Extreme Ultraviolet Lithography Mask
Observation Using a High-Magnification Objective
with Three Multilayer Mirrors

Speaker : 豊田 光紀 氏 (東北大学 多元物質科学研究所)
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Motivated by the need for at-wavelength observation of extreme ultraviolet (EUV) lithography masks, we developed a full-field EUV microscope that has a multilayer-mirror objective. This objective is based on an innovative optical design that gives a magnification of over $\times 1400$, enabling us to use a conventional CCD camera as the detector. In addition, when the objective is corrected for off-axis aberrations, it has a large field of view of a few hundred micrometers, permitting rapid inspection of a whole mask. We demonstrate this novel design by presenting at-wavelength images of a mask.