
Volume Extreme Ultraviolet Holographic Imaging With Numerical Optical Sectioning

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Index Terms: Holography, image analysis

1. Introduction

Holographic imaging in the soft X-ray (SXR) and extreme ultraviolet (EUV) have been demonstrated in several experiments realized using EUV/SXR lasers and synchrotron sources. These include the first realization of soft X-ray laser holography at Lawrence Livermore National Laboratory using a large laser facility, and the holographic recording of biological samples and sub-micron structures using soft X-ray radiation from synchrotrons, among other experiments [?], [?]. A key idea in these experiments is to use coherent short wavelength illumination to achieve a spatial resolution beyond the reach of visible light