

## **Optimizing 100 kV electron beam lithography for X-ray grating fabrication**

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I will present our ongoing work on optimizing 100 kV electron beam lithography (EBL) for fabricating astronomical X-ray gratings, specifically identifying the isofocal dose for our fabrication process. Future astronomical measurements require grating groove profiles with nanometer precision over a nearly 10,000 square millimeter area. Exposing at the isofocal dose increases our process latitude and allows us to more reliably produce high-fidelity gratings.