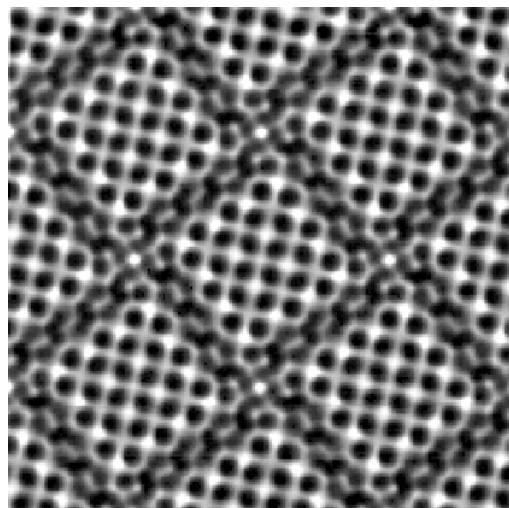
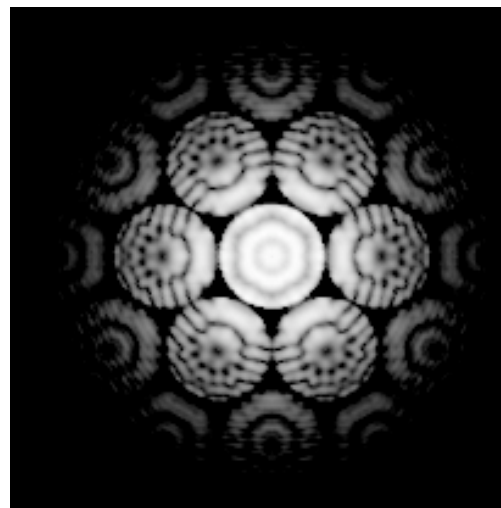


FFT-Multislice Simulation Suite

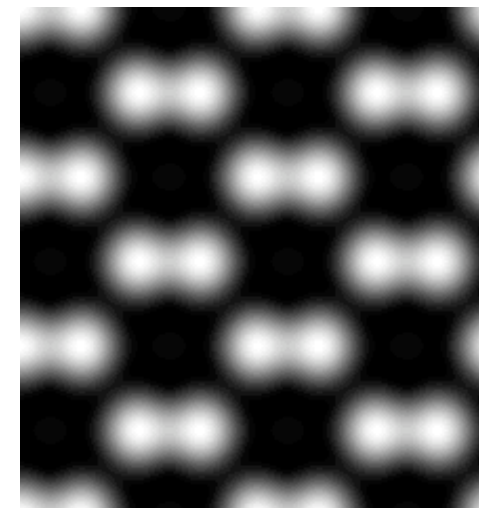
HREM Image and Diffraction Simulation both for CTEM and STEM



HREM image (tungsten niobate)



CBED pattern (Si [111])



STEM-HAADF image (GaAs [011])

xHREM is a cross-platform (Windows and Mac OS) simulation suite that generates HREM images, CBED patterns and STEM-HAADF images. xHREM is based on FFT-multislice and wave-optics developed by Kazuo Ishizuka [1-4].

Key Features

- ◆ User Friendly Graphical Interface
- ◆ High Quality Image Output
- ◆ (Option) CBED and STEM Extensions
- New** ◆ (Option) STEM and CBED Extension Pro (64 bit)
- New** ◆ STEM Extension Cluster (to the number of license)

References

- [1] K. Ishizuka and N. Uyeda, Acta Cryst. A33 (1977) 740-749: A New Theoretical and Practical Approach to the Multislice Method
- [2] K. Ishizuka, Ultramicroscopy 5 (1980) 55-65: Contrast Transfer of Crystal Images in TEM
- [3] K. Ishizuka, Acta Cryst. A38 (1982) 773-779: Multislice Formula for Inclined Illumination
- [4] K. Ishizuka, Ultramicroscopy 90 (2001) 71-83: A practical approach for STEM image simulation based on the FFT multislice method