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Supporting information for article:

3D electron diffraction techniques

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Supporting Information

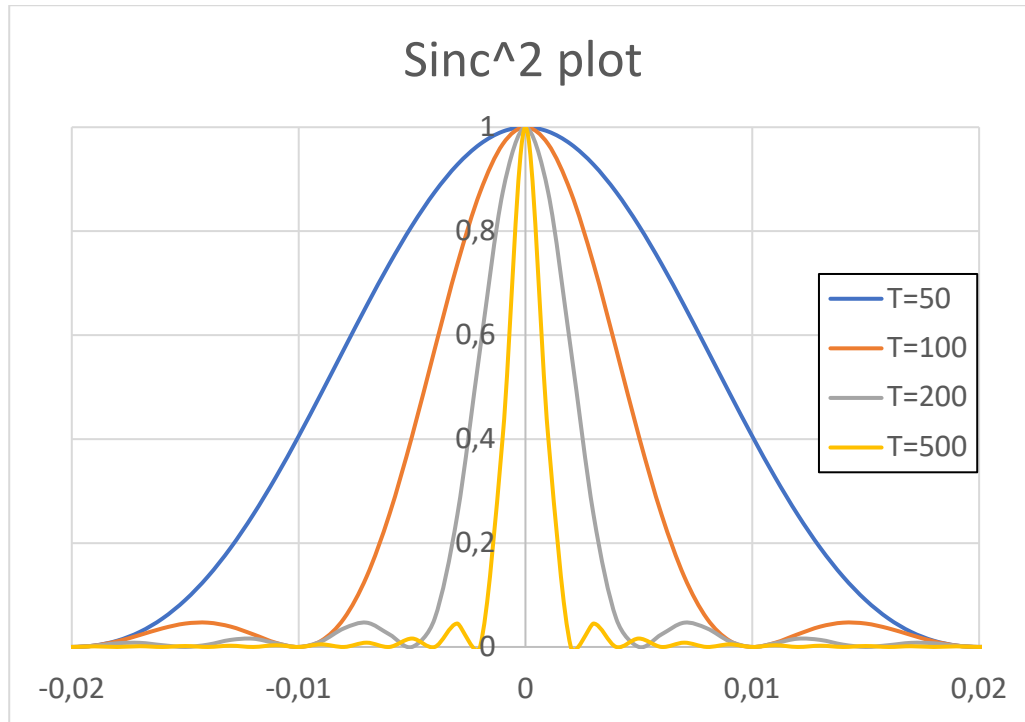


Fig. S1: Plot of the function $\text{sinc}^2(s_h) = \frac{\sin^2(\pi t s_h)}{s_h^2}$ for 4 different thicknesses of 50 Å, 100 Å, 200 Å and 500 Å. s_h is in Å⁻¹ unit.

Table S1: Table with the values of $|s_h|$ for which the Sinc² function becomes 80%, 50% 30% and 10% of its maximum value.

Sinc ² (Å ⁻¹)	T=50 Å	T=100 Å	T=200 Å	T=500 Å
80%	0.0051	0.0026	0.0013	0.0005
50%	0.0089	0.0044	0.0022	0.0009
30%	0.011	0.0057	0.0028	0.0011
10%	0.015	0.0073	0.0037	0.0015

The tilt angle α which is required to have, for a given reflection h in Bragg condition, a certain excitation error s_h , in case of a rotation around a tilt axis normal to his given by the simple formula:

$$s_h = h \sin(\alpha)$$

By applying the inversion of this formula we can obtain a table of the tilt angles α away from the Bragg condition for which we have a reduction of the reflection intensity of 80% 50% 30% or 10%. If we calculate that for a reflection corresponding to a periodicity of 3 Å ($|h|=0.33 \text{ Å}^{-1}$)

α	T=50	T=100	T=200	T=500
0.8	0.88	0.45	0.22	0.09
0.5	1.53	0.76	0.38	0.15
0.3	1.89	0.98	0.48	0.19
0.1	2.58	1.26	0.64	0.26