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Microscopy AND Microanalysis



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Au-Flat™

Gold foil sample supports for Cryo-EM

Reconstruction with less data

Au-Flat significantly reduces beam-induced motion during imaging, improving image quality and resolution.

Uniform vitreous ice across the grid

Au-Flat uses new, ultra-flat precision gold grids which create a more planar surface. The result is **more uniform thin ice** across the entire surface, including areas near the grid bars.

Accurate defocus

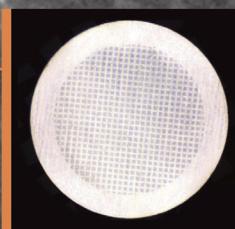
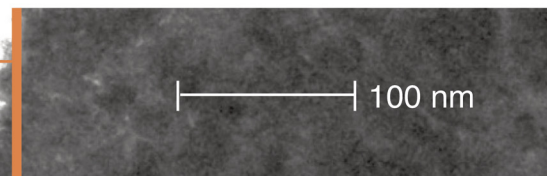
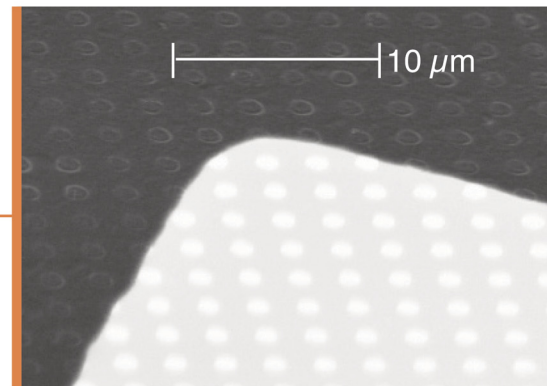
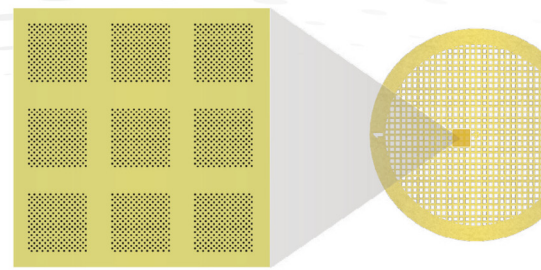
The smaller grain size of the gold film provides more features to focus on, leading to **more accurate** defocus during data collection.

Durable

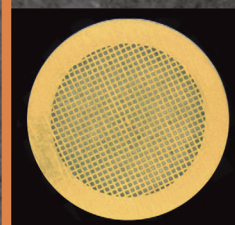
The ultra-thin biocompatible Au-Pd film is supported by a **thicker gold grid** to improve strength during handling and sample prep, while its wider rim provides safer tweezer handling. We have also optimized our Au-Pd film stress to **maximize strength** during sample prep and vitrification.

No mistakes

The lighter color of the Au-Pd film compared to the underlying gold mesh grid makes it **easy to identify the film side** of the grid during sample preparation.



Au/Pd Foil Side



Gold Mesh Side

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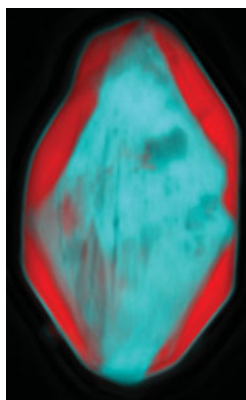
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On the Cover: Bicolor Fe L-edge X-ray ptychographic chemical-state image of a test particle of partially delithiated LiFePO₄ showing sharp interfaces between oxidized (red) and reduced (cyan) regions. A corresponding STXM image shows blurred interfaces, incomplete apparent phase separation and distorted spectra due to the long tails, extending as far as 100nm, of the point-spread function of the zone plate used for STXM. By comparison, the particle is about 1000nm wide. Image adapted from Figure 4 in the manuscript by Marcus, et al. on page 1452.

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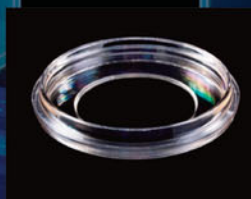


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