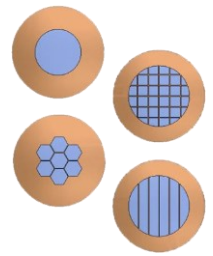


New LUXFilm® coatings for clear TEM imaging



Luxel is pleased to announce new LUXFilm® coatings for TEM sample supports and GridTape®. With partnership from the National Institutes of Health and leading research institutions, Luxel has developed two new films which exhibit low background signal from their intrinsic structure. Both products, LUXFilm® EM and LUXFilm® NC, offer greater image clarity relative to the original LUXFilm® Polyimide, and are substantially stronger than traditional polyolefin or formvar coatings. The new films offer a choice of mechanical properties: LUXFilm® EM is a high modulus film, while LUXFilm® NC has a lower modulus with higher elongation before break. Users report that the EM film can be mechanically advantageous for GridTape®, and that both EM and NC provide excellent imaging on individual TEM grids. NC can offer even better image clarity than EM in some applications.

The new coatings offer several additional benefits to TEM workflows. Researchers often resort to heavy metal staining strategies to increase contrast at the expense of some feature resolution. The reduced background noise of the EM and NC films allow the use of lighter tissue staining protocols than previously possible with LUXFilm® Polyimide, enabling better data quality with more clearly differentiated features. For serial section workflows, reduced heavy metal staining can also increase the lifetime of a microtome's diamond knife.

Comparison of LUXFilm® image noise power measured by Fourier analysis:

