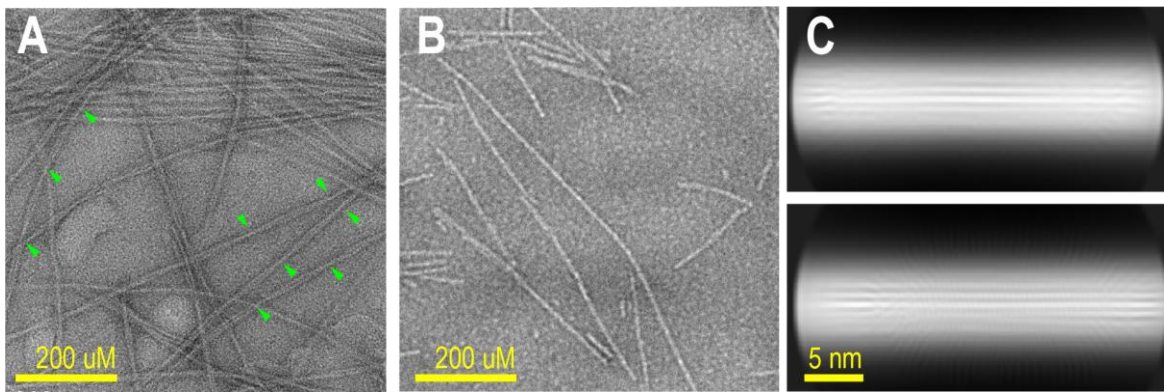
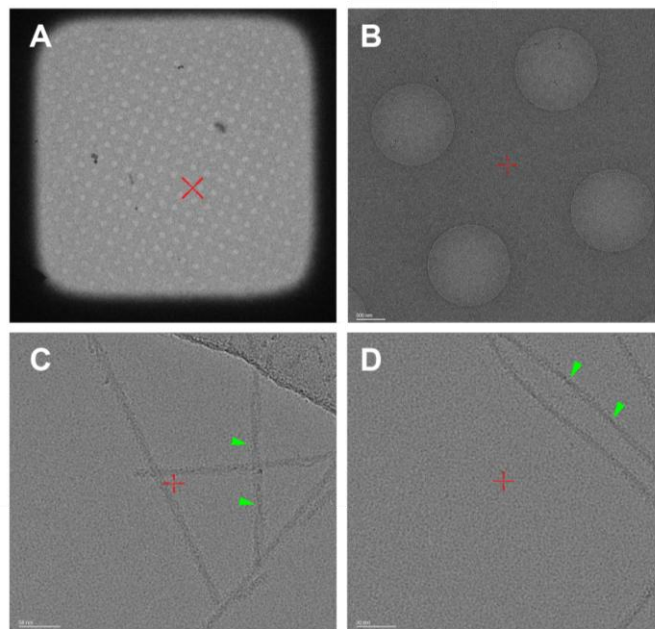


**Fig. 1.** (A) SDS page gel image of the purified  $\alpha$ -syn monomer, confirming the pure  $\alpha$ -syn monomer with ~14kDa of molecular weight. (B) ThT fluorescence intensities of  $\alpha$ -syn alone (black), with A $\beta$ 42 PFFs (red), or A $\beta$ 42 monomers (orange) at an  $\alpha$ -syn: A $\beta$ 42 ratio of 50:1. (C) ThT fluorescence intensities of  $\alpha$ -syn alone (black), with A $\beta$ 42 PFFs (blue), or A $\beta$ 42 monomers (light blue) at an  $\alpha$ -syn: A $\beta$ 42 ratio of 25:1.



**Fig. 2.** Negatively stained TEM images of  $\alpha$ -syn fibrils formed in the presence of A $\beta$ 42 fibrils (A) and in the absence of A $\beta$ 42 (B). Green arrows in (A) indicate twisted fibrils. (C) Cryo-EM 2D class average image of untwisted  $\alpha$ -syn fibrils formed in the absence of A $\beta$ 42.



**Fig. 3.** Examples of cryo-EM images of  $\alpha$ -syn amyloid fibrils grown with A $\beta$ 42 fibrils, obtained on a Glacios microscope. Representative images of squares (A) and holes of the grid (B), and frozen fibrils (C, D). The images confirm appropriate ice thickness and the presence of well-distributed twisted  $\alpha$ -syn fibrils, indicating suitability for data collection.