Fig. 1. CryoEM structure of *E. coli* BAM in nanodiscs. A. The role of BAM in the biogenesis of b-barrel outer membrane proteins. Figure adapted from Imai *et al*., 2019. **B**. The procedure for forming BAM-inserted nanodiscs used for our EM studies. **C**. A representative SEC trace from the purification of BAM-inserted nanodiscs, along with SDS-PAGE gels for each of the purifications from our study. The black triangles indicate the nanodisc proteins. **D**. Negative-stain images for all BAM-inserted nanodisc samples in our study. The scale bars represent 50 nm. **E**. CryoEM reconstructions of BAM-inserted D1, E3, and N2 nanodiscs, including a top-down cutaway view of a superposition of the three structures showing nearly identical densities for each of the different nanodiscs used. The red dashed line indicates the location of the barrel domain of BamA, while the black dashed line indicates the perimeter of the nanodisc density. **F**. A refined model of BAM docked within the cryoEM 3D reconstruction of BAM in E3 nanodiscs at 4 Å resolution showing an outward-open conformation (red dashed lines), with an orthogonal view from the top of the barrel of BamA. **G.** Representative electron density for BamA (residues 600-620), BamB (residues 58-77), and BamD (residues 164-181).

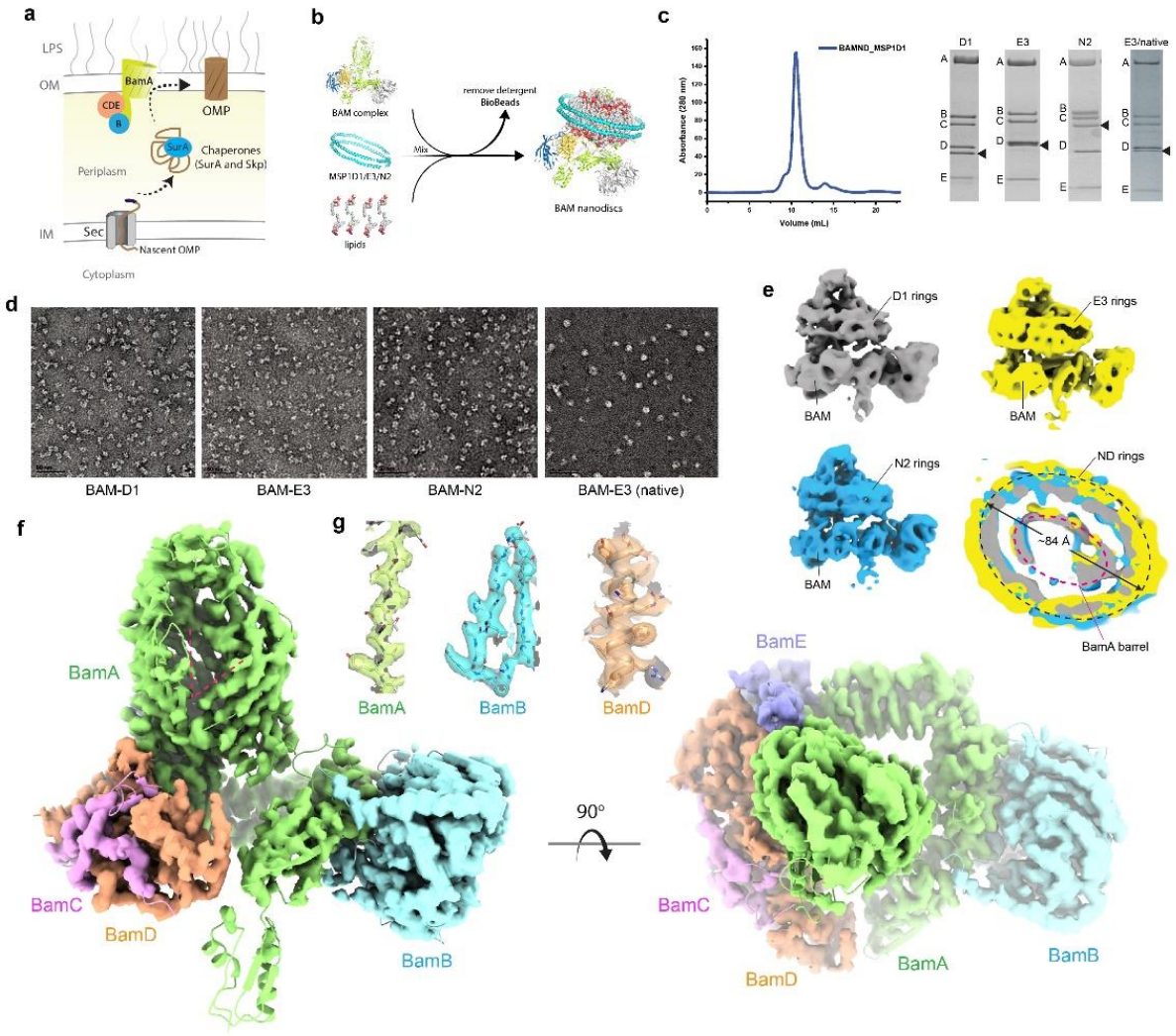

Fig. 2. Representative cryo-EM micrograph (A) and 2D classifications (B).