## The Growth of Hexagonal Bipyramids, X- and Star-shaped Twins of Cholic Acid during Acidic Hydrolysis of the Hydrogel of its Ester

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Fig. S1 Cryo-SEM image of crystal prisms of cholic acid (CA).



Fig. S2 Crystal structure of the crystal prisms of CA: (a) top view and (b) side view of the fiber-layer structures. H atoms and solvent molecules are omitted for clarity.



Fig. S3 One hexagonal bipyramid showing bright color at the middle section (optical micrograph).



Fig. S4 Large amorphous solids (indicated by an arrow) and hexagonal crystals coexist in the aqueous solutions (optical micrograph).