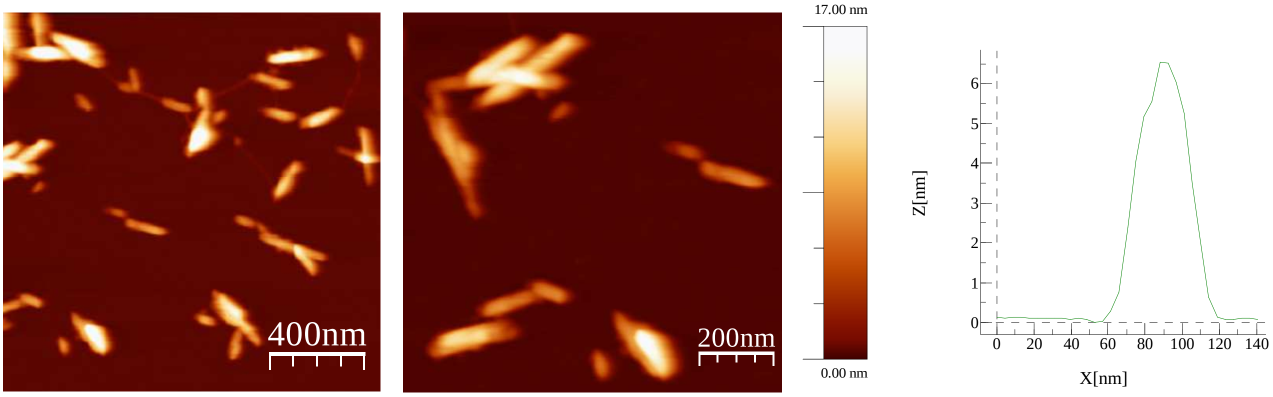
Atomic Force Microscopy images
used to determine the thickness of the three sources of cellulose nanocrystals

AFM setup and sample preparation

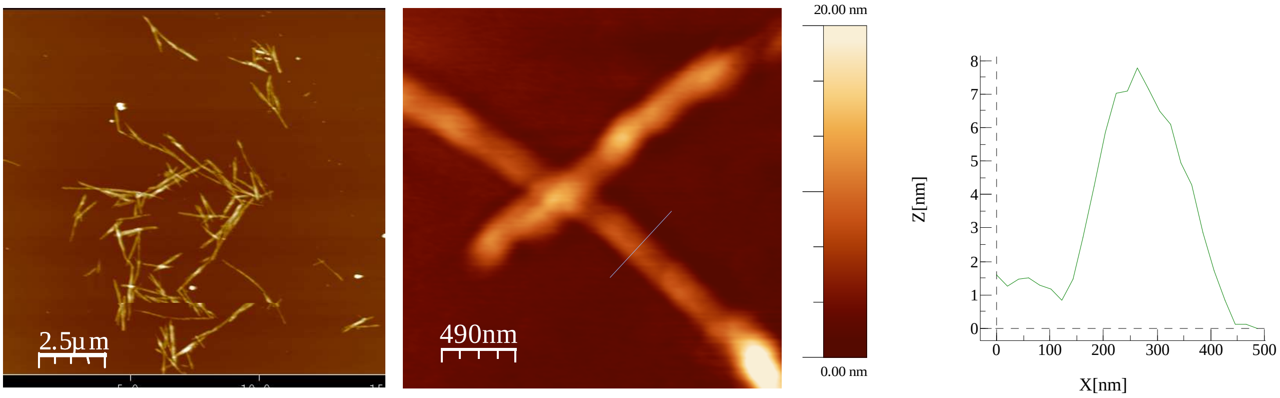
Measurements were performed with a Nanowizard II AFM on top of an inverted microscope (Eclipse Ti Nikon, Japan). The AFM stand-alone head is equipped with a linearized piezoelectric ceramic with a 15 µm range and an infrared laser. Rectangular-shaped cantilevers (PPP-NCHR, Nanosensors) were used to intermittent contact□mode imaging in air.

10 µL of the suspension were deposited on top of a fresly cleaved mica surface and let dry for 30 minutes in an furnace thermally regulated (60°C).

cotton cellulose nanocrystals



bacterial cellulose nanocrystals



cladophora cellulose nanocrystals