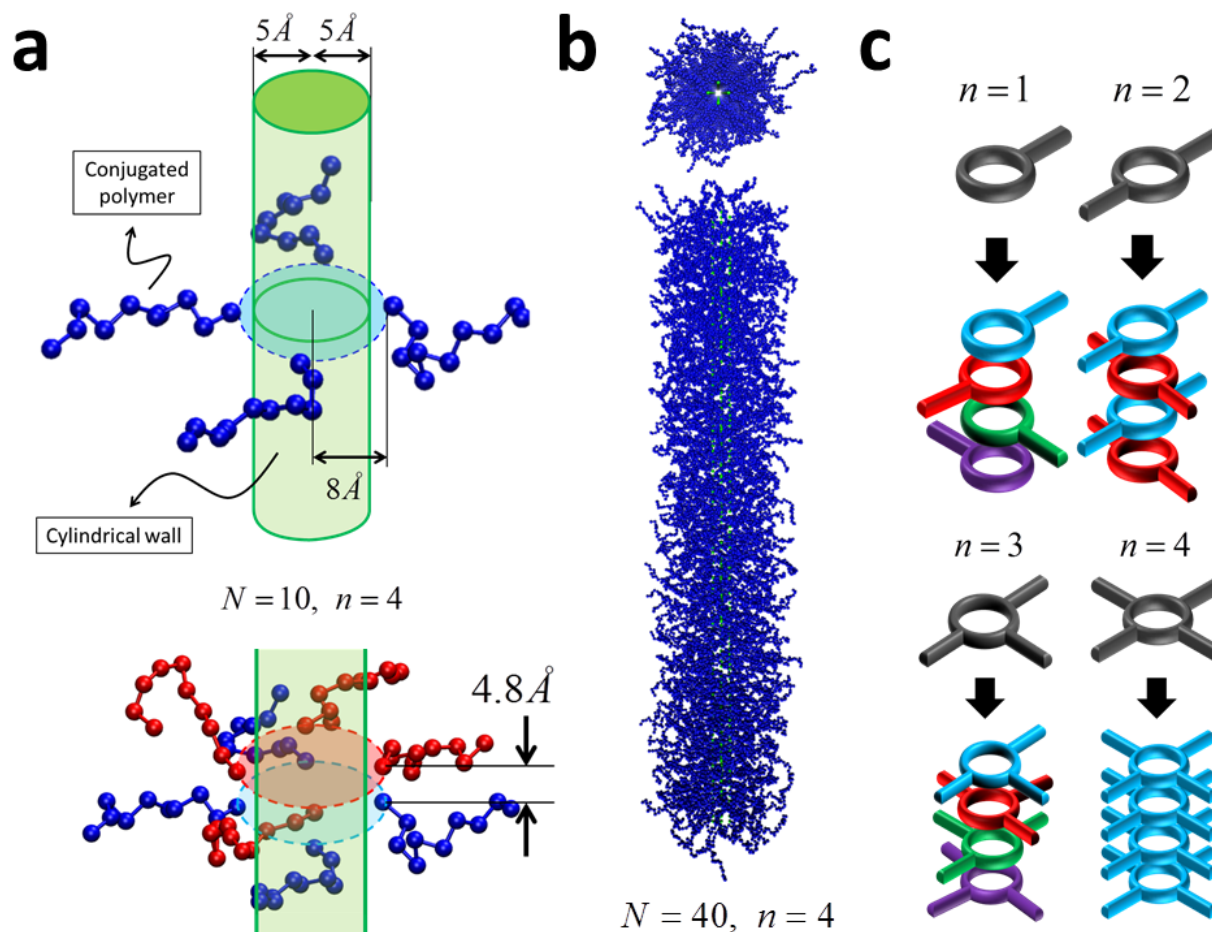


## SUPPORTING INFORMATION

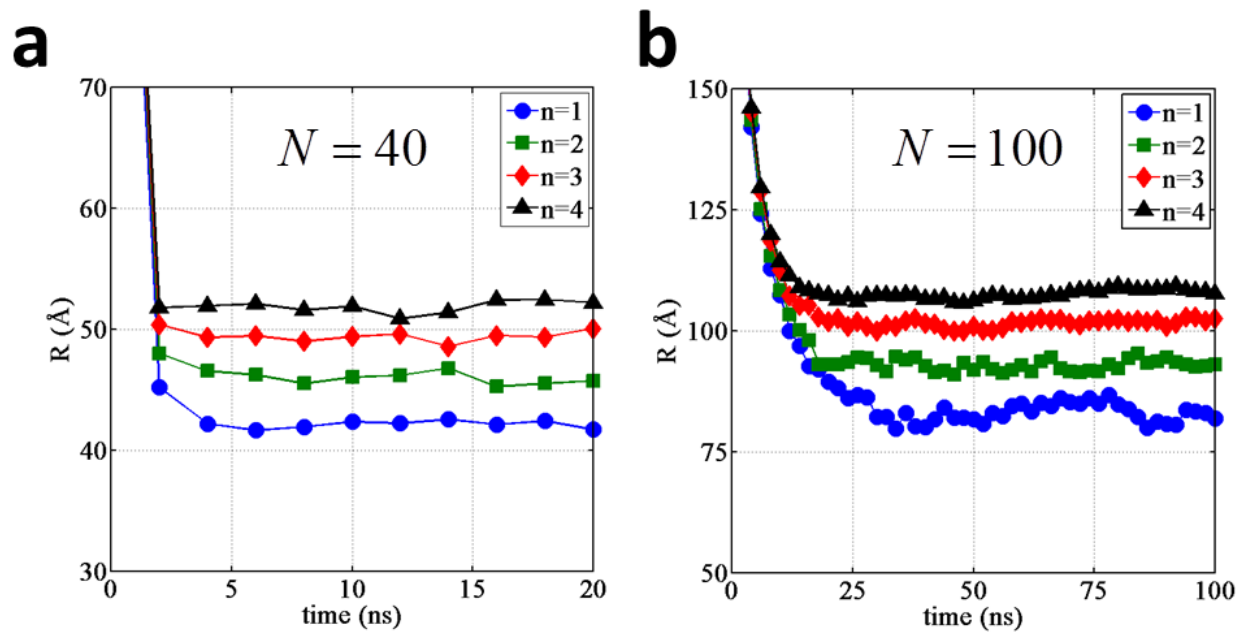
# Directing the self-assembly of supra-biomolecular nanotubes using entropic forces

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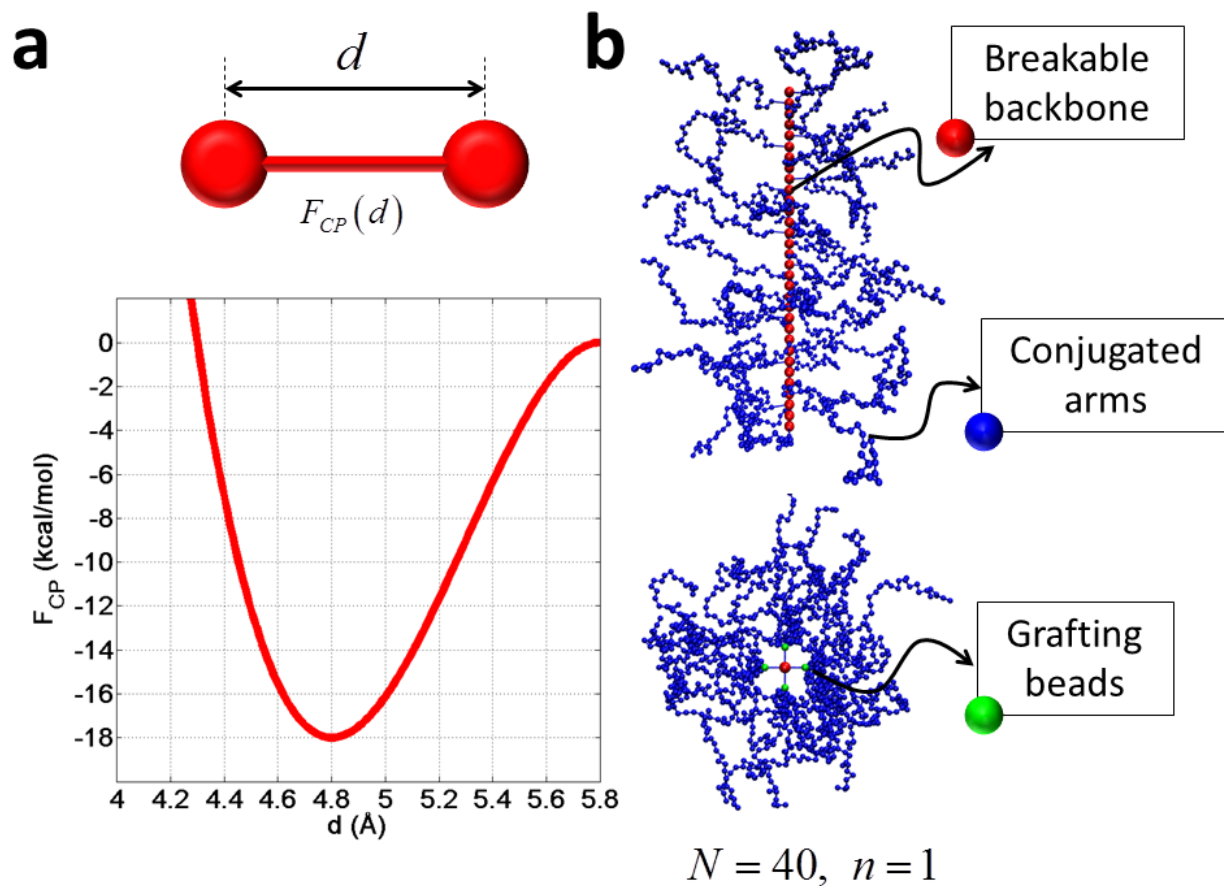
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**Figure S1. Schematic representation of the pc-CPNs coarse grain model for the study of the corona with scaling behavior.** (a) Cartoon representation of the basic configuration of the polymer conjugated cyclic peptides as described in the *Methods* section. (b) Snapshot of a nanotube from a simulation. The polymer beads are colored in blue and the grafted beads in lime green. (c) Stacking order of homomeric cyclic peptides followed to construct the nanotubes. Different colors correspond to different orientations.



*Figure S2. Convergence of the corona width during simulations.*



**Figure S3.** Coarse grain model of pc-CPN with extensible backbone and the parameterized potential of the backbone (red beads). (a) Parameterized potential through which the core beads of the nanotube interact, showing smooth convergence to zero energy that allows the study of spontaneous nanotube breakage due to thermal fluctuations. (b) Snapshot of the nanotube from one of the simulations.