

Structural disorder, filament growth and self-poisoning in short rods confined onto a flat wall

Yongxiang Gao^{*ab}, Violet Farkas^b, Roel. P. A. Dullens^b and Dirk G. A. L. Aarts^b

^a Institute for Advanced Study, Shenzhen University, Nanshan District, Shenzhen, Guangzhou, China 518060

^b Department of Chemistry, Physical and Theoretical Chemistry Laboratory, University of Oxford, South Parks Road, Oxford, OX1 3QZ, UK

Supplementary information

1. Mapping experimental system to hard rod

We map our experimental system to the hard rod based on the experimentally determined radial distribution function. The two peaks used to determine the effective diameter (D_{eff}) and length (L_{eff}) of the rod are highlighted in Fig. S1, corresponding to the side-by-side distance, and the shortest separation of rods between layers (L'), where

$$L' = \sqrt{(D_{\text{eff}}/2)^2 + [L_{\text{eff}} - (1 - \sqrt{3}/2)D_{\text{eff}}]^2}.$$

After mapping, D_{eff} and L_{eff} are determined to be 1.18 μm and 2.80 μm , respectively.

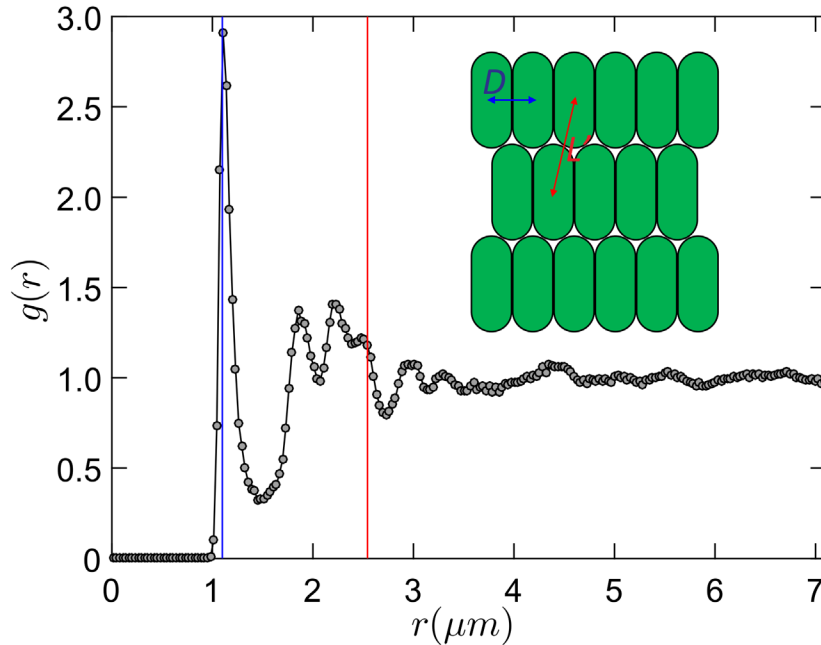


Fig. S1: Mapping experimental system to the hard rod based on the radial distribution function.