## Atomistic Structure of Monomolecular Surface Layer Self-Assemblies: Toward Functionalized Nanostructures - Supporting Information

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Figure S1: Detailed view of Fig.3. Open circles give scattering intensities divided by the form factor I(Q)/P(Q). The red line is the fit curve from Eq.(1), which equals the structure factor as a function of the scattering vector Q. The corresponding Bragg peaks are indicated. The large number of additional small reflections is probably due to distortions close to the boundaries of the domains. The size of these domains is in a raw estimation about 200 nm, obtained from the 100 reflection and Scherrers formula for 2D planes.



Figure S2: The mean potential is given as function of the reaction coordinate  $\zeta$ . Here the reaction coordinate is interpreted as protein-protein distance [nm] and as relative orientation of the nanodisk with respect to the scattering vector. Maxima correlate to high local densities, i.e. 13 nm (unit cell dimension), while minima correspond to lower distributions of matter and indicate pores or domain boundaries. Some of these characteristic features are indicated by vertical lines.