

A Langmuir-Schaefer approach for the synthesis of highly ordered organoclay thin films

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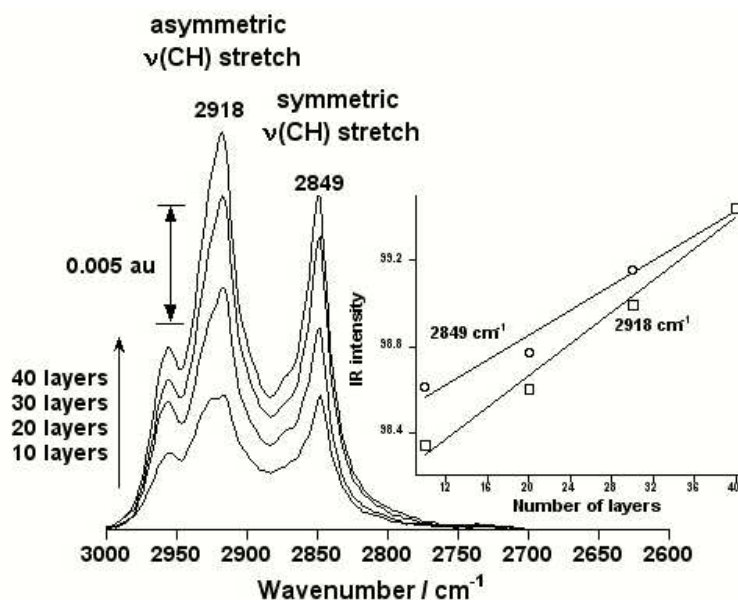


Figure S1. Infrared spectra of the $\nu(\text{CH})$ region for hybrid DODA-montmorillonite films of different thickness (from 10 to 40 DODA-clay layers), transferred onto CaF_2 plates at a surface pressure of 10 mN m^{-1} and for a clay concentration in the subphase of 200 mg dm^{-3} (the inset shows the relation between the IR intensity and the number of layers).

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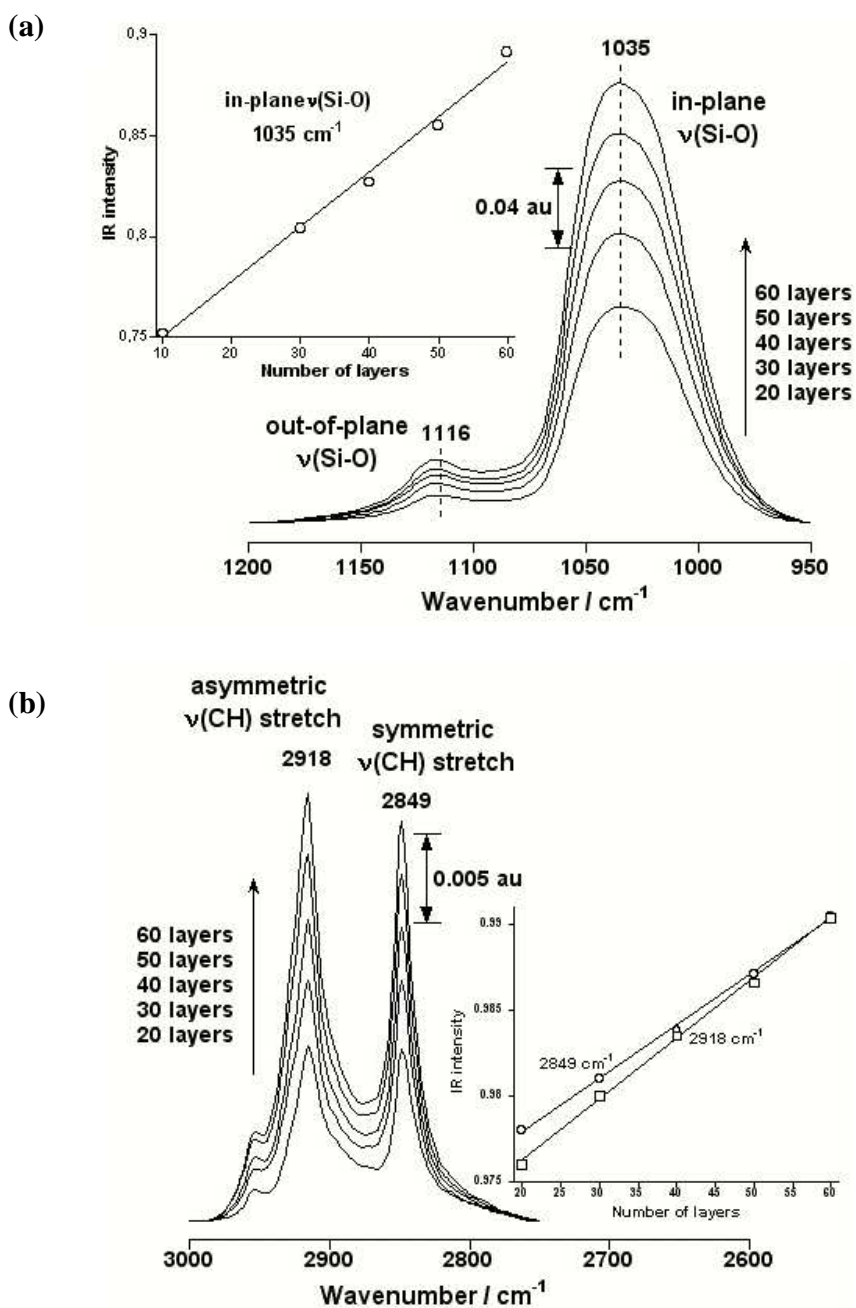


Figure S2. Infrared spectra of the (a) $\nu(\text{Si-O})$ and (b) $\nu(\text{CH})$ regions for hybrid DODA-montmorillonite films of different thickness (from 20 to 60 DODA-clay layers), transferred onto CaF_2 plates at a surface pressure of 10 mN m^{-1} and for a clay concentration in the subphase of 60 mg dm^{-3} (the insets show the relation between the IR intensity and the number of layers).

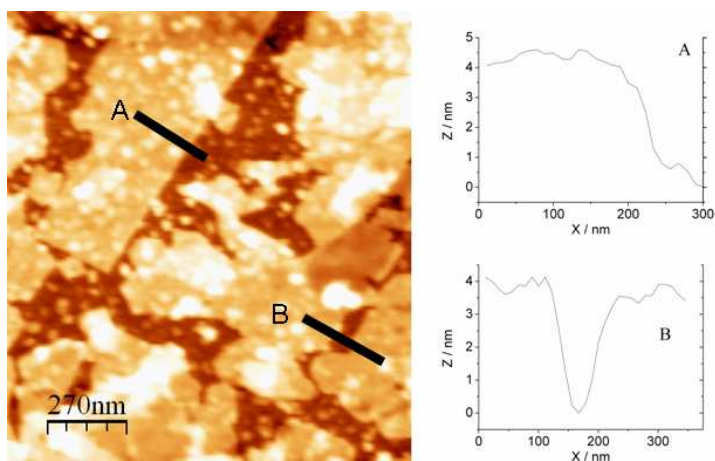


Figure S3. AFM profile for hybrid monolayers of DODA and montmorillonite clay particles transferred onto glass plates at the surface pressure of 10 mN m^{-1} . The clay concentration in the suspension was 10 mg dm^{-3} .

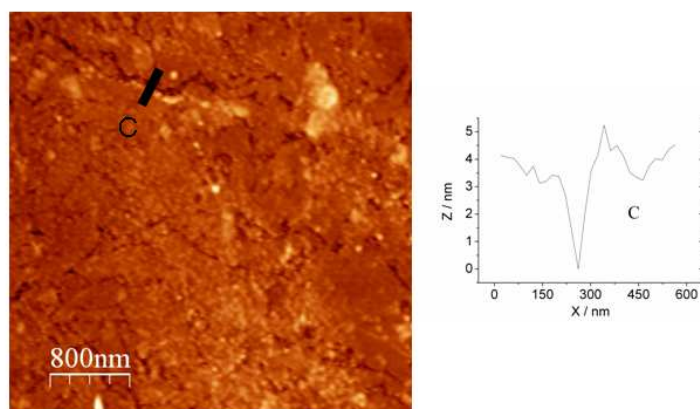


Figure S4. AFM profile for hybrid monolayers of DODA and montmorillonite clay particles transferred onto glass plates at the surface pressure of 15 mN m^{-1} . The clay concentration in the suspension was 10 mg dm^{-3} .