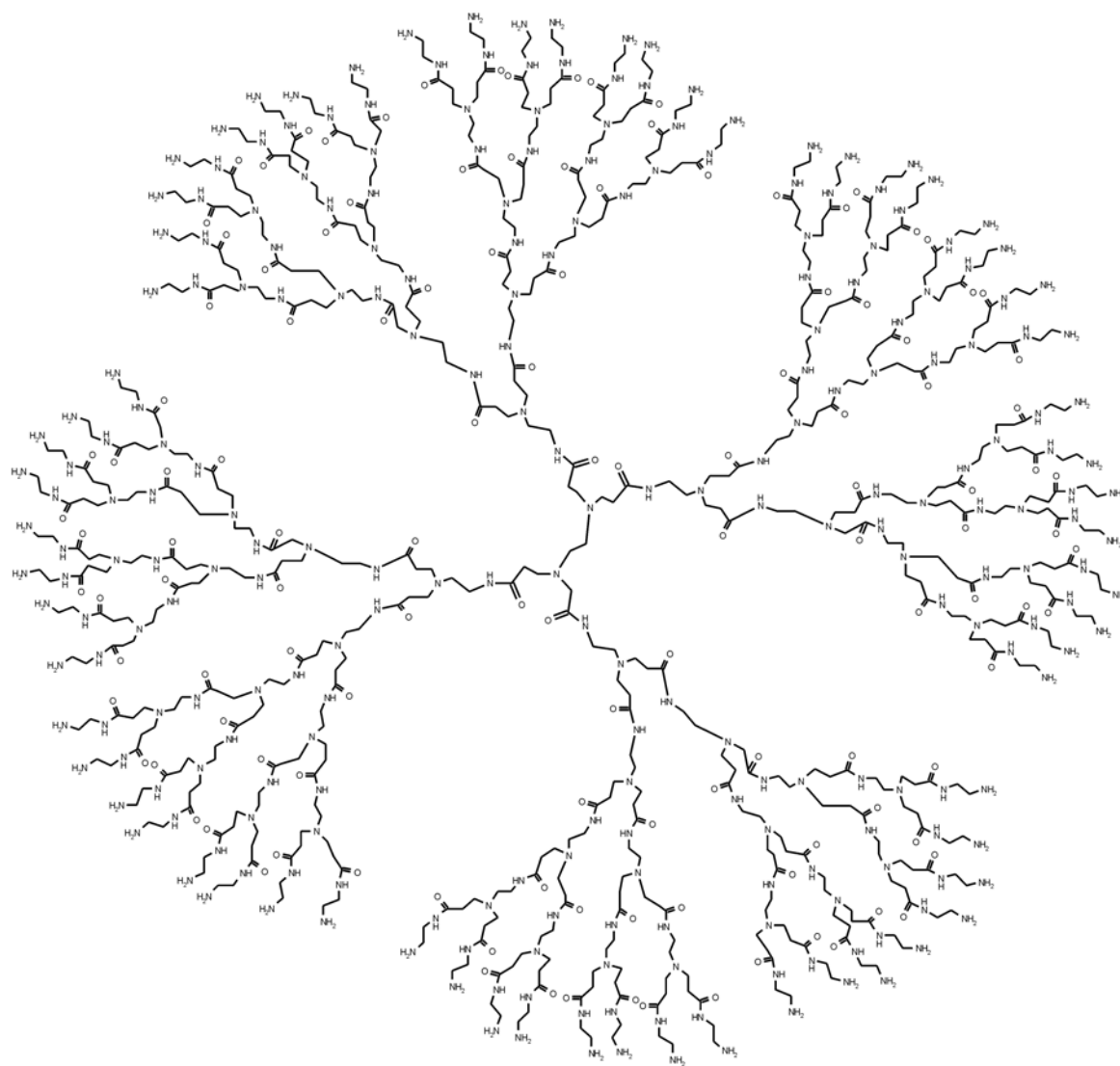
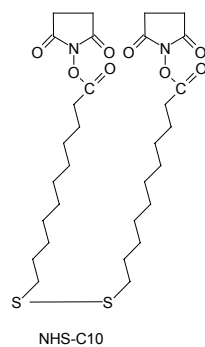


Supporting information

**Micro and Nanofabrication of Robust Reactive Arrays Based on Covalent Coupling of Dendrimers to
Activated Monolayers**

Geerten H. Degenhart, Barbara Dordi, Holger Schönherr, and G. Julius Vancso**



G₄ PAMAM

Scheme S1: Top: structure of adsorbate (NHS-C₁₀); bottom: structure of G₄ PAMAM dendrimer.

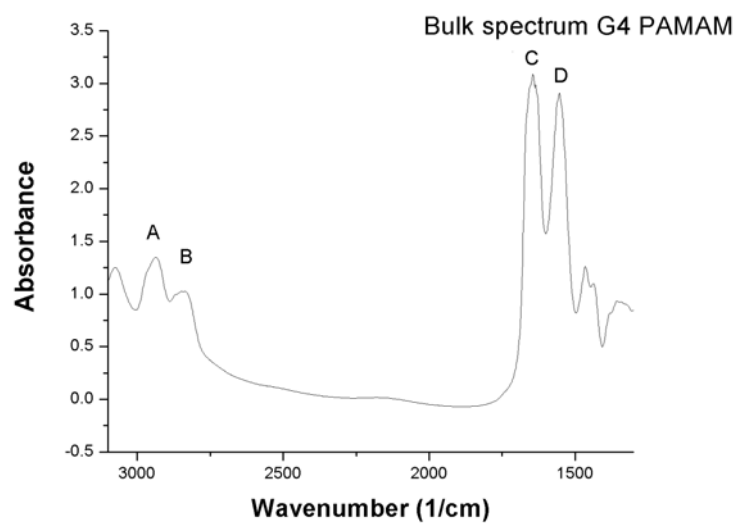


Figure S1: Transmission FTIR spectrum of G₄ PAMAM (bulk sample).

Supporting information

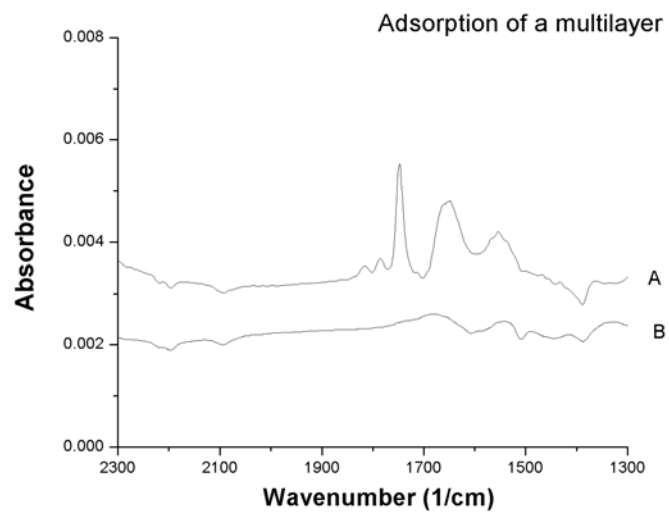


Figure S2: FTIR spectra of a dendrimer multilayer (A), and the same substrate after overnight storage in an airtight case, followed by thorough rinsing (B).

Supporting information

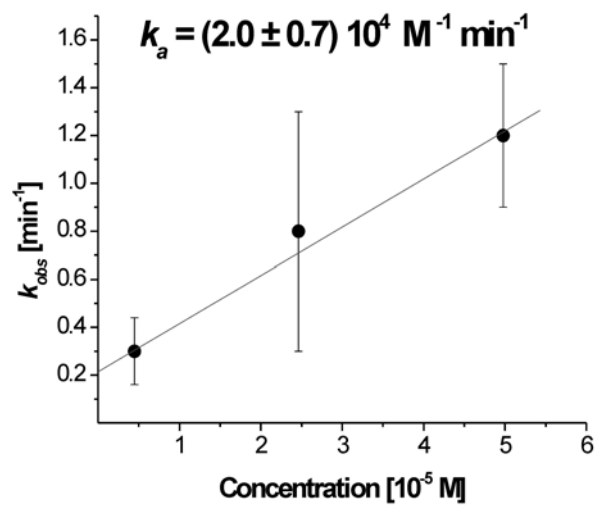


Figure S3. Concentration dependence of k_{obs} for PAMAM G_4 . The best fitted line through the data has a slope of k_a and an intercept of k_d . Owing to the relatively larger errors of the data, the intercept and hence also k_d remain undefined.

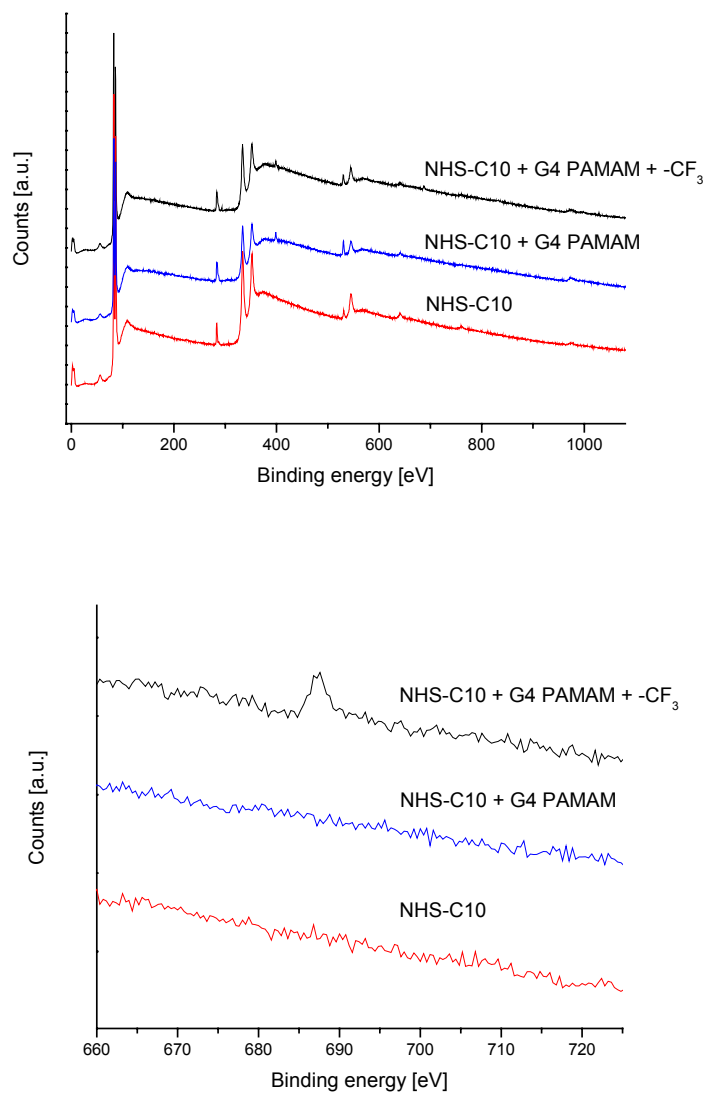


Figure S4: Top: XPS survey scans of NHS-C₁₀ SAM, NHS-C₁₀ SAM functionalized with a 5.5×10^{-5} M solution of G₄ PAMAM, and NHS-C₁₀ SAM functionalized with G₄ PAMAM following the reaction with TFAA; bottom: Enlarged sections of the XPS scans showing the F(1s) signals.

Supporting information

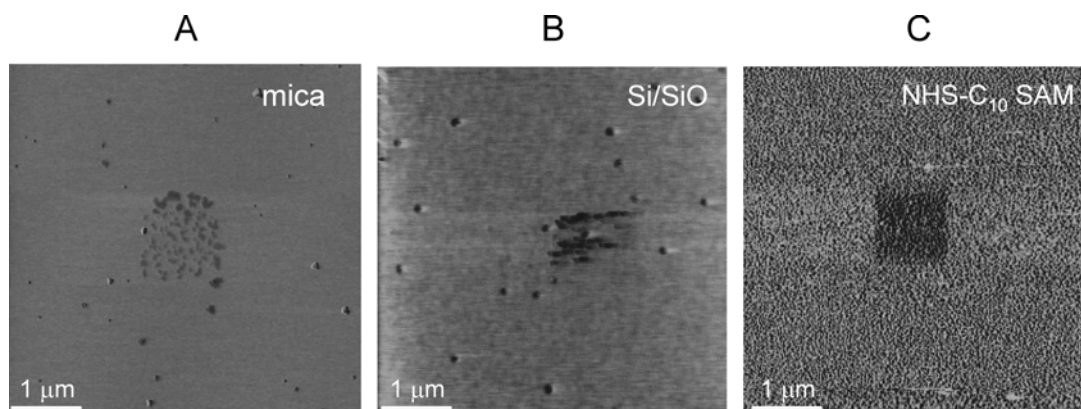


Figure S5. LFM images of a $1 \times 1 \mu\text{m}^2$ square of PAMAM G₄ on three different substrates produced by DPN (acquired in air; scan size $5 \times 5 \mu\text{m}^2$; friction forces [a.u.] increase from dark to bright contrast).