147e Preparation of Aminosilane Self-Assembled Monolayer for Immobilizing DNA

Chun-Yi Lin, Bing-Hung Chen, Yu-Lang Lee, and Chien-Hsiang Chang

Preparation of aminosilane self-assembled monolayer (SAM) on glass substrate for immobilizing DNA was studied. AFM was employed to monitor the roughness of SAM and the morphology of subsequently adsorbed DNA. The wettability of each functionalized surface was characterized by contact angle measurements as well. Consequently, adsorbed DNA forms preferentially a circle pattern, with a diameter from 80 to 100nm and a height from 5 to 10 nm, on the aminosilane SAM, in contrast to a nonuniform pattern of adsorbed DNA if the bare glass was used as the substrate.