Electronic Supplementary Material (ESI) for Polymer Chemistry

Supporting Information

Factors Influencing the Growth and Topography of Nanoscale Films Fabricated by ROMP-Mediated Continuous Assembly of Polymers

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S1: *Topography of CAP_{ROMP} films prepared using different catalysts, as imaged by AFM.*

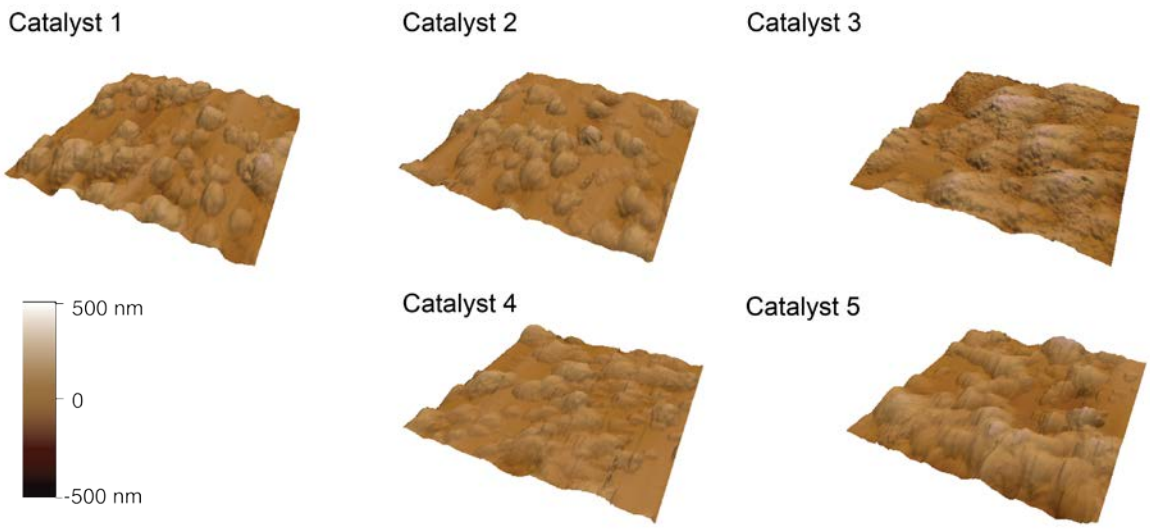

Fig. S1 3D-height mode images of CAP_{ROMP} **P1** films obtained using different ROMP catalysts (25h). Only films obtained using catalyst **3** were observed to have high surface coverage within the range of analysis.

S2: *Topography of CAP_{ROMP} films prepared using different catalyst concentrations, as imaged by AFM.*

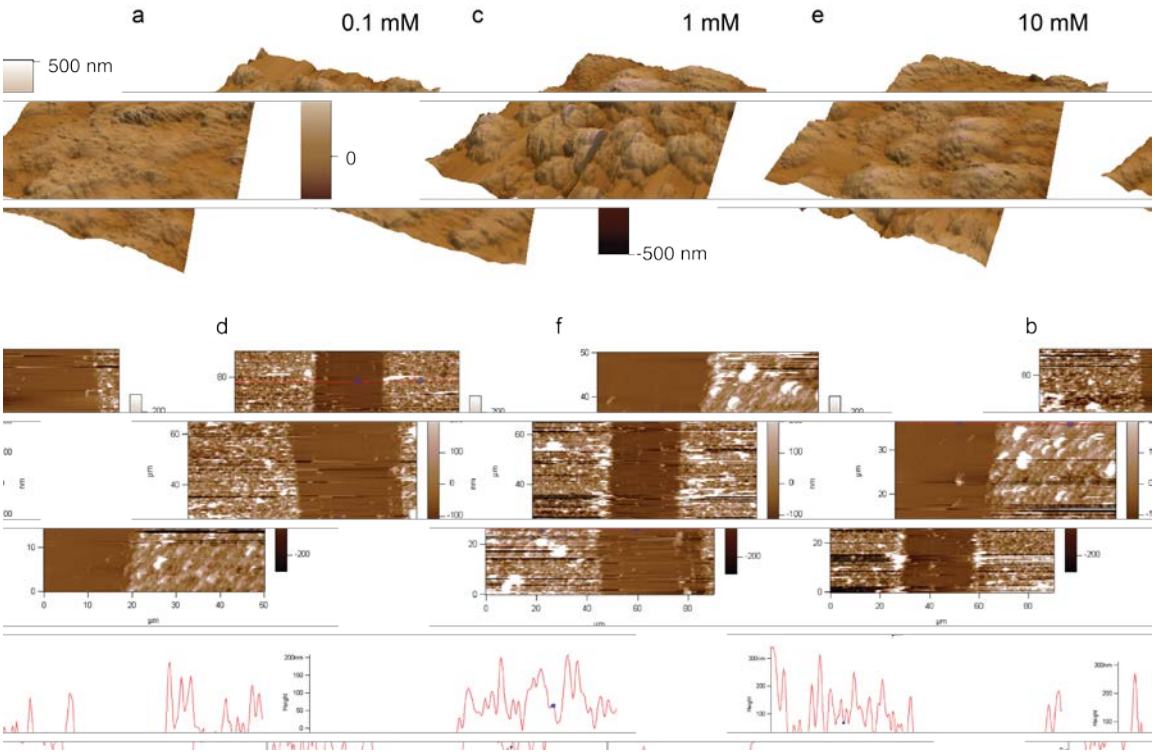

Fig. S2 3D-height mode images of CAP_{ROMP} **P1** films obtained after 20 h using catalyst **3** at concentrations of (a) 0.1, (c) 1, and (e) 10 mM. AFM 2D (x,y) images showing a scratched zone of the CAP_{ROMP} **P1** films obtained using concentrations of (b) 0.1 (7 h), (d) 1 (5 h), and (f) 10 mM (20 h). Scratch profiles ((b), (d), (f)) indicate that all films formed at different catalyst concentrations were observed to have high surface coverage within the range of analysis.

S3: *Comparison of CAP_{ROMP} film thickness by ellipsometry and AFM.*

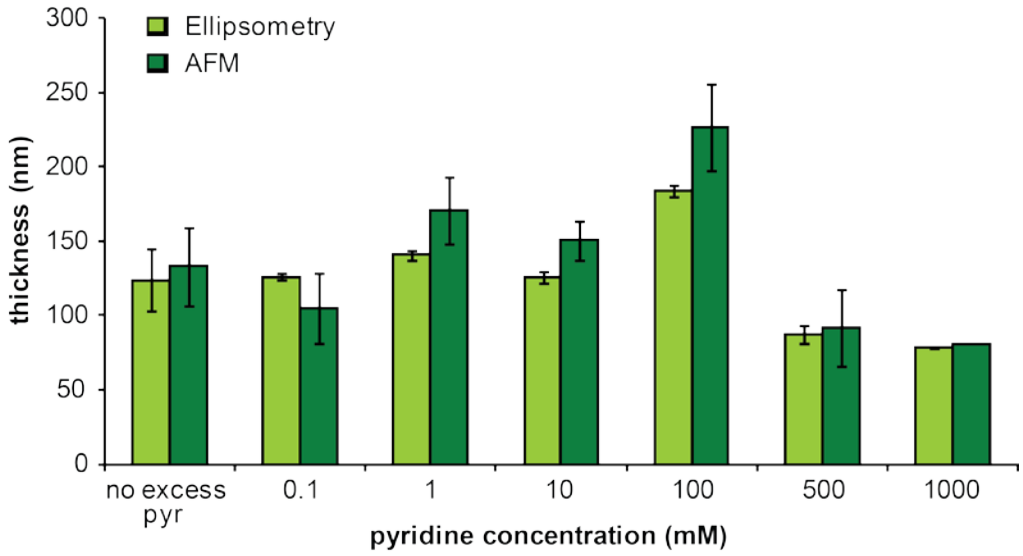

Fig. S3 Film thicknesses of CAP_{ROMP} **P1** films prepared using different concentrations of additional pyridine added to the system, as measured by ellipsometry and AFM scratch analysis. Good agreement between ellipsometry and AFM analysis was observed.