

Electronic Supplementary Information (ESI)

for

Morphology of poly(methyl methacrylate) and polystyrene blends upon Langmuir-Schaefer deposition

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Electronic Supplementary Information includes $5 \times 5 \mu\text{m}^2$ AFM height images of LS films after 1 deposition step (Figure S1), $5 \times 5 \mu\text{m}^2$ AFM height images of LS films after 2 deposition steps (Figure S2), $1 \times 1 \mu\text{m}^2$ AFM images (height and phase) of LS films after 1 inverse deposition step where LS dipping has been performed through water onto the polymer blend monolayer (Figure S3), and $5 \times 5 \mu\text{m}^2$ AFM height image of an LS film after 1 deposition step at lower surface pressure compared with an AFM image of an LS film at normal surface pressure but with inverse dipping through water (Figure S4).

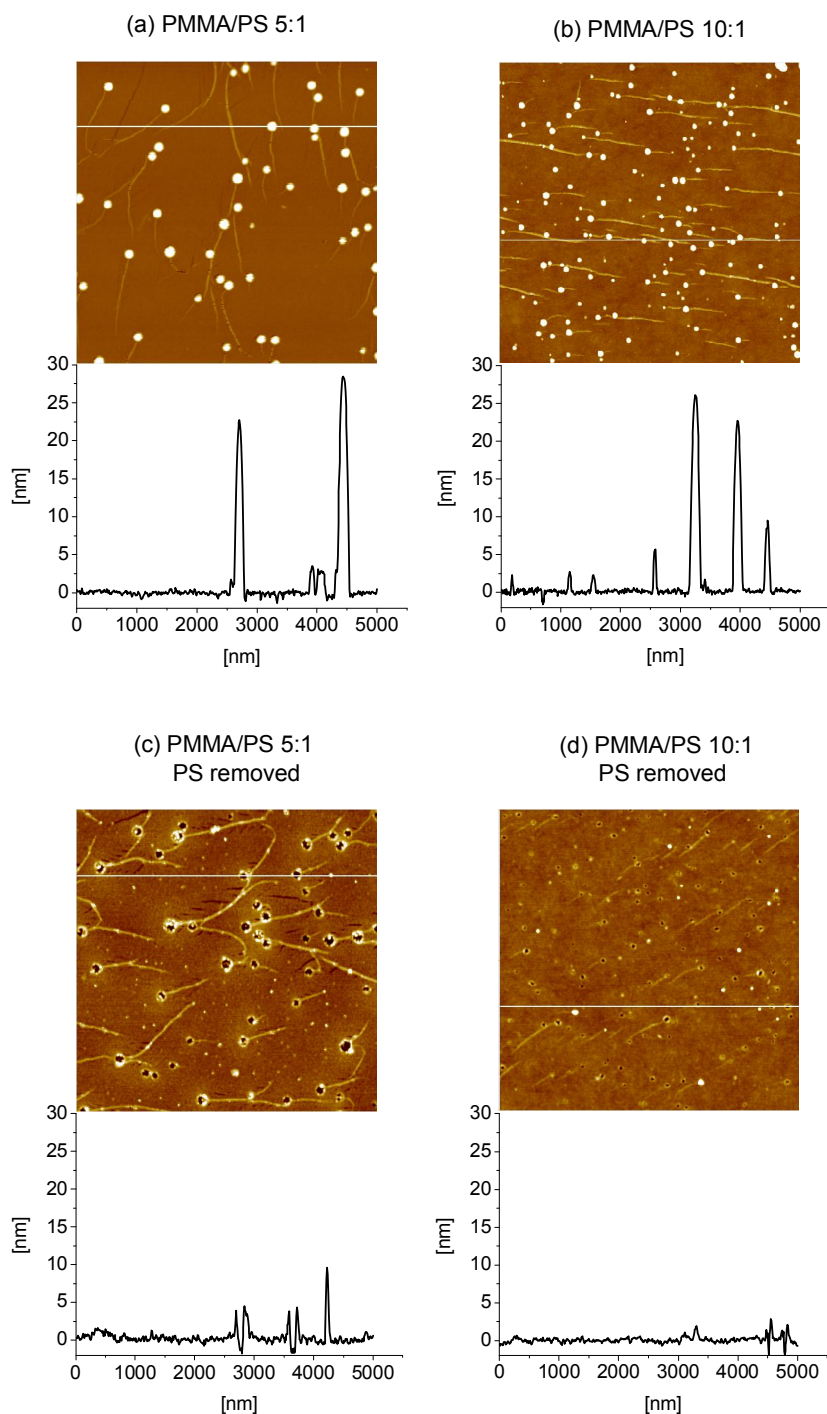


Figure S1. 5×5 μm² AFM images of LS films after 1 deposition step: (a) PMMA/PS ratio 5:1, (b) PMMA/PS ratio 10:1, (c) same film as (a) but PS has been removed by cyclohexane immersion, (d) same film as (b) but PS has been removed by cyclohexane immersion. A white line in the images indicates the location of a representative height scan which is shown below each image.

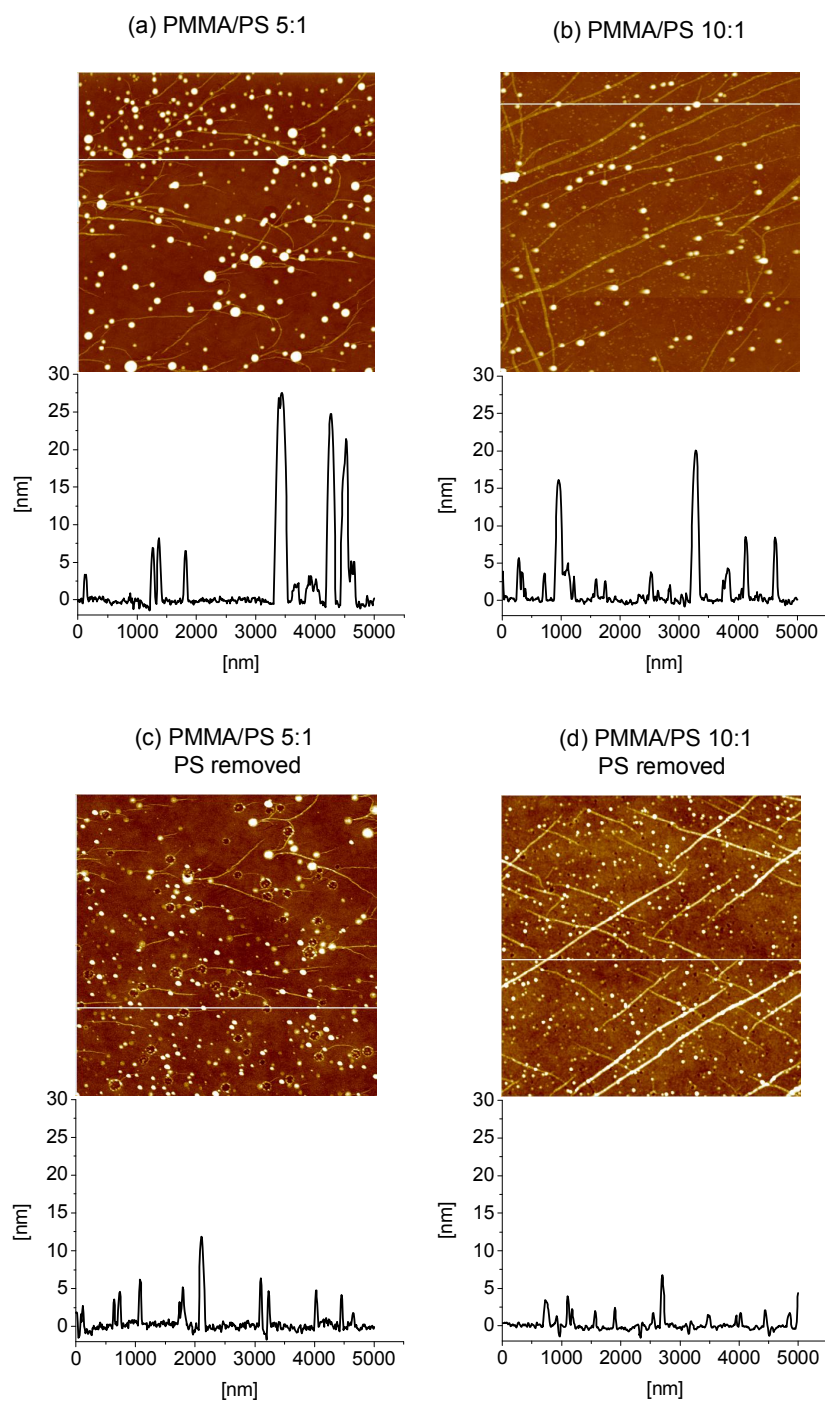


Figure S2. $5 \times 5 \mu\text{m}^2$ AFM images of LS films after 2 deposition steps: (a) PMMA/PS ratio 5:1, (b) PMMA/PS ratio 10:1, (c) same film as (a) but PS has been removed by cyclohexane immersion, (d) same film as (b) but PS has been removed by cyclohexane immersion. A white line in the images indicates the location of a representative height scan which is shown below each image.

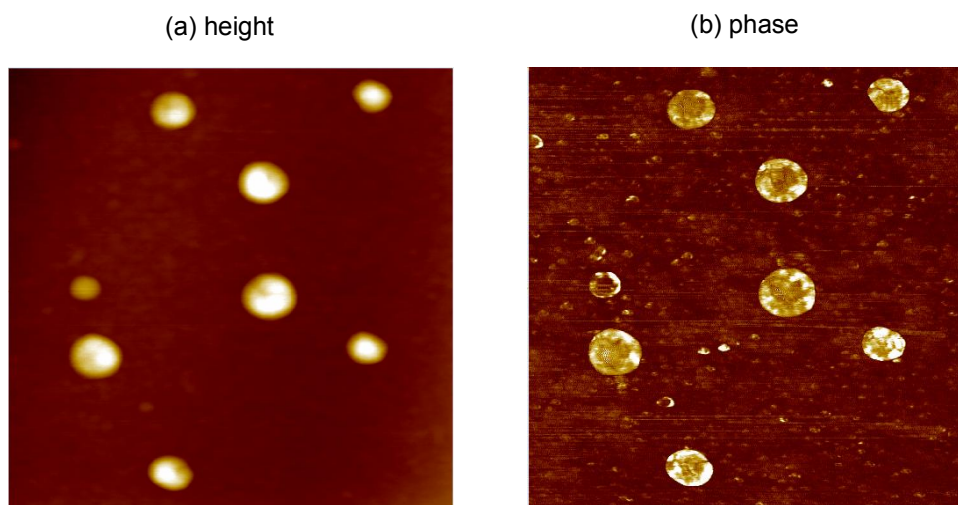


Figure S3. $1 \times 1 \mu\text{m}^2$ AFM images of an LS film from PMMA/PS of 10:1 mass ratio deposited *via* inverse dipping, *i.e.*, the substrate has been transferred to the monolayer on the water surface through water and not through air as is the case in normal dipping: (a) height image, (b) phase image.

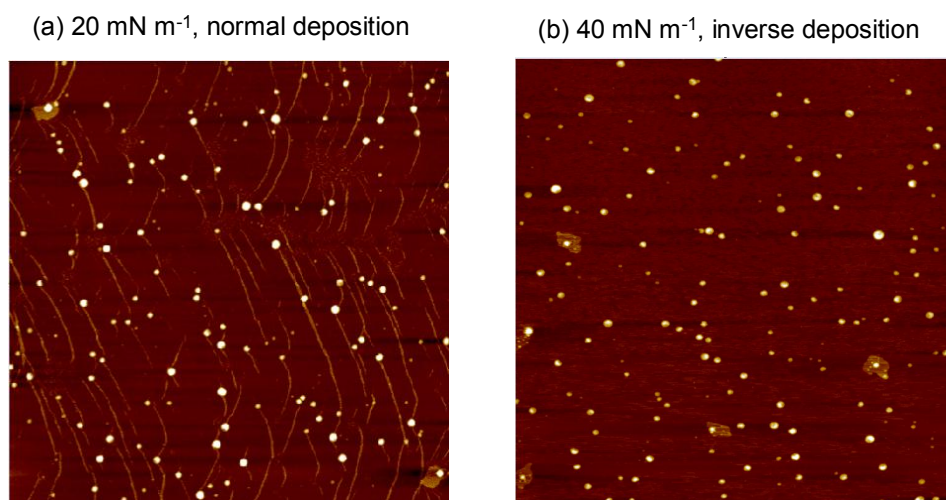


Figure S4. $5 \times 5 \mu\text{m}^2$ AFM images of an LS film from PMMA/PS of 10:1 mass ratio deposited (a) *via* normal dipping, *i.e.*, transferring the substrate to the water surface through air but the deposition has been performed at a lower surface pressure (20 mN m^{-1}), and (b) *via* inverse dipping, *i.e.*, the substrate has been transferred to the water surface through water and the deposition has been performed at normal surface pressure (40 mN m^{-1}).