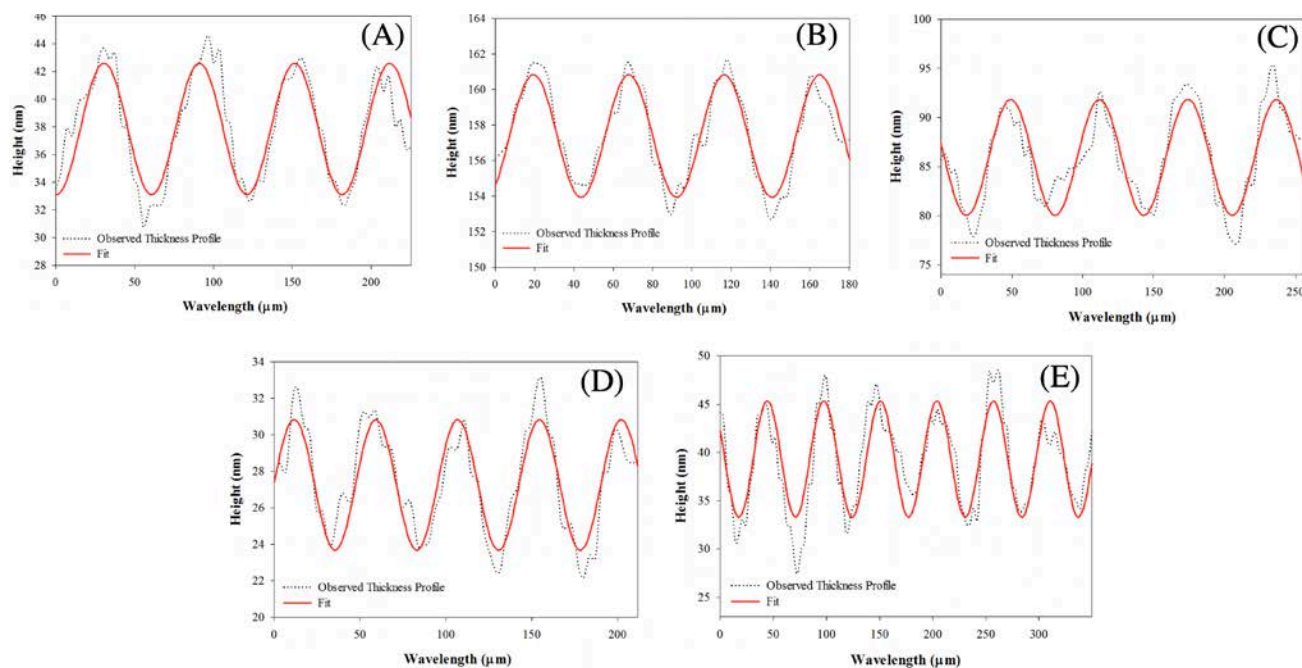


# Evolution of Surface Morphology of Spin-Coated Poly(methylmethacrylate) Thin Films

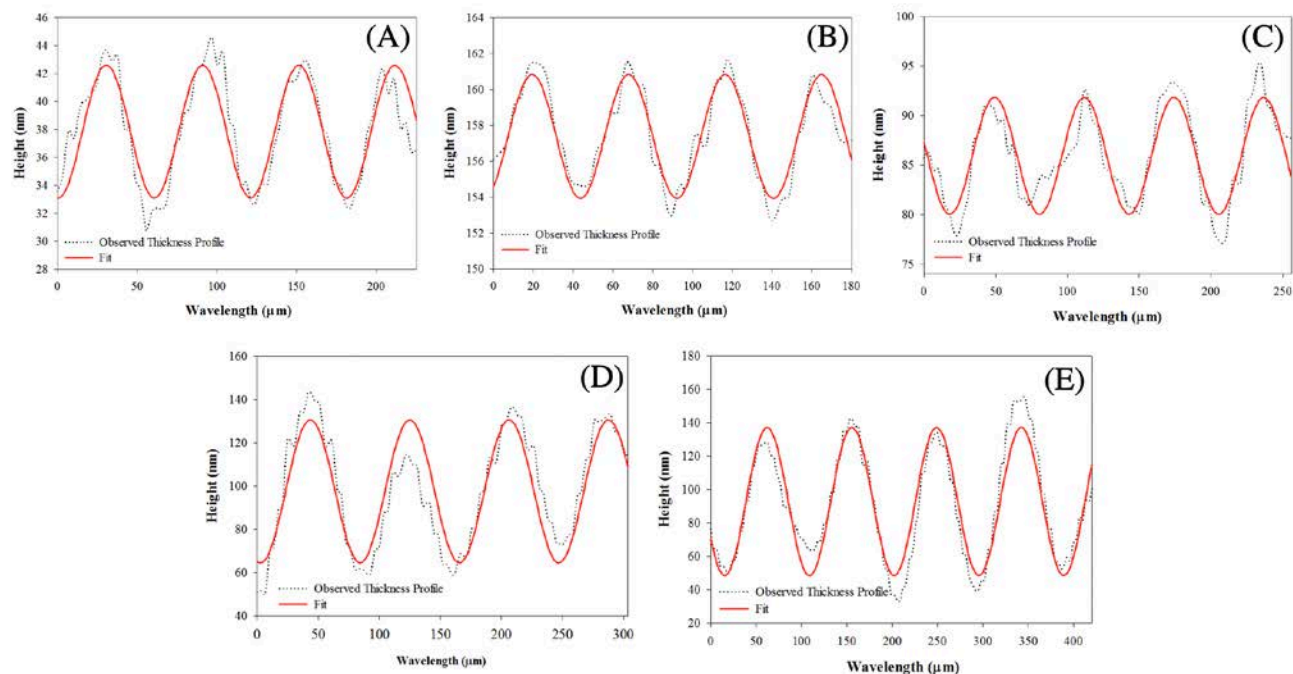
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## Supplementary Materials



**Figure S1.** Line scan profiles of the wrinkled PMMA surfaces for films cast from 2.5 g/dL. Black lines are the observed profile data and the red lines are fits. (A)  $\omega = 2000$  RPM,  $a_0 = 4.7 \pm 0.3$  nm,  $\lambda_0 = 60.4 \pm 0.5$   $\mu\text{m}$ ; (B)  $\omega = 3000$  RPM,  $a_0 = 3.5 \pm 0.2$  nm,  $\lambda_0 = 48.6 \pm 0.3$   $\mu\text{m}$ ; (C)  $\omega = 5000$  RPM,  $a_0 = 5.9 \pm 0.3$  nm,  $\lambda_0 = 62.5 \pm 0.4$   $\mu\text{m}$ ; (D)  $\omega = 7000$  RPM,  $a_0 = 3.6 \pm 0.2$  nm,  $\lambda_0 = 47.6 \pm 0.4$   $\mu\text{m}$ ; (E)  $\omega = 8000$  RPM,  $a_0 = 6.0 \pm 0.3$  nm,  $\lambda_0 = 53.3 \pm 0.2$   $\mu\text{m}$ . Uncertainties are the standard error of the estimated fit.



**Figure S2.** Line scan profiles of the wrinkled PMMA surfaces for films cast at 2000 RPM. Black lines are the observed profile data and the red lines are fits. (A) 3 g/dL PMMA,  $a_0 = 22.2 \pm 0.9$  nm,  $\lambda_0 = 74.8 \pm 0.4$   $\mu$ m; (B) 4 g/dL PMMA,  $a_0 = 19.6 \pm 0.9$  nm,  $\lambda_0 = 76.1 \pm 0.3$   $\mu$ m; (C) 5 g/dL PMMA,  $a_0 = 34.3 \pm 1.4$  nm,  $\lambda_0 = 68.9 \pm 0.3$   $\mu$ m; (D) 6 g/dL PMMA,  $a_0 = 33.0 \pm 1.7$  nm,  $\lambda_0 = 81.4 \pm 0.6$   $\mu$ m; (E) 7 g/dL PMMA,  $a_0 = 44.3 \pm 1.4$  nm,  $\lambda_0 = 93.4 \pm 0.3$   $\mu$ m. Uncertainties are the standard error of the estimated fit.

**Table S1.** Fit parameters for the global fit from figure 6A. The shared intercept was  $35.3 \pm 1.4$   $\mu$ m.

Concentration g/dL	Slope + error	$r^2$
2.5	$0.167 \pm 0.010$	0.69
3.0	$0.117 \pm 0.008$	0.83
4.0	$0.082 \pm 0.005$	0.95
5.0	$0.072 \pm 0.004$	0.95
Overall Global Fit		0.87