Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Single-Step Fabrication of Large-Scale Patterned Honeycomb Structures via Self-Assembly of a Small Organic Molecule

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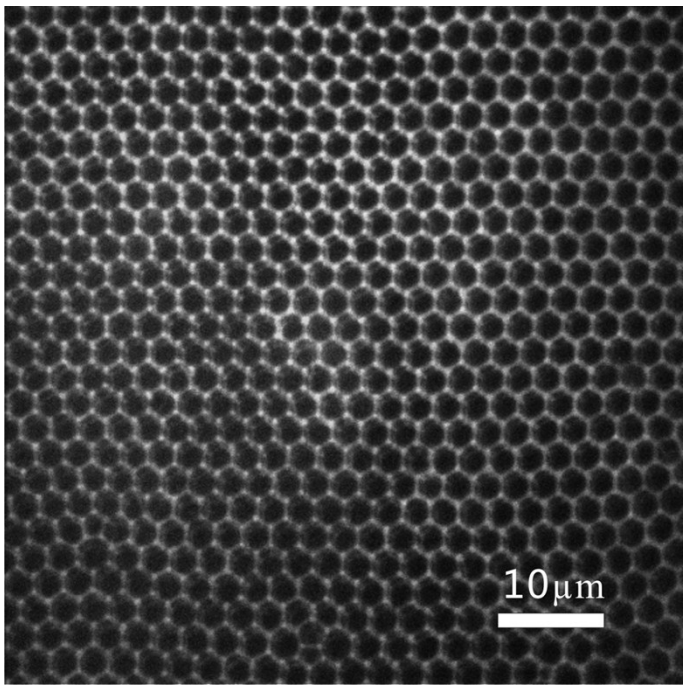

Figure S1 A representative optical micrograph of the drop-cast film derived from AOB-t8 (1×10^{-3} M) in dichloromethane (DCE) on the glass plate at room temperature.

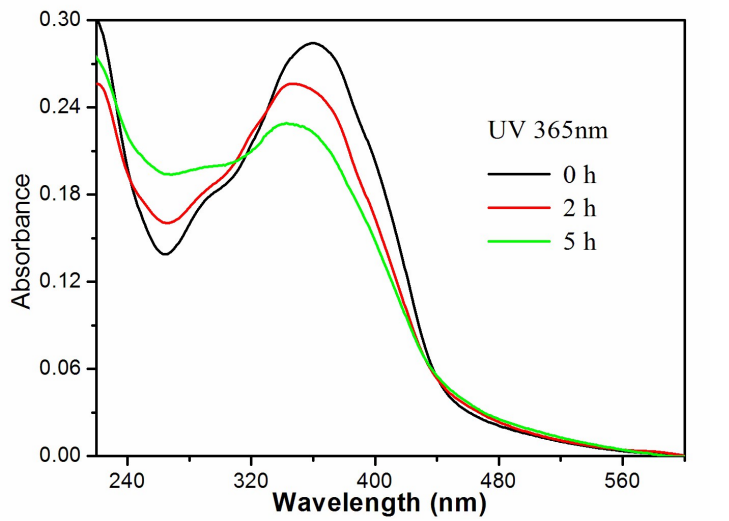

Figure S2 UV-Vis absorption spectra of AOB-t8 drop-casting film before and after 365 nm irradiation for 5 hours at room temperature.

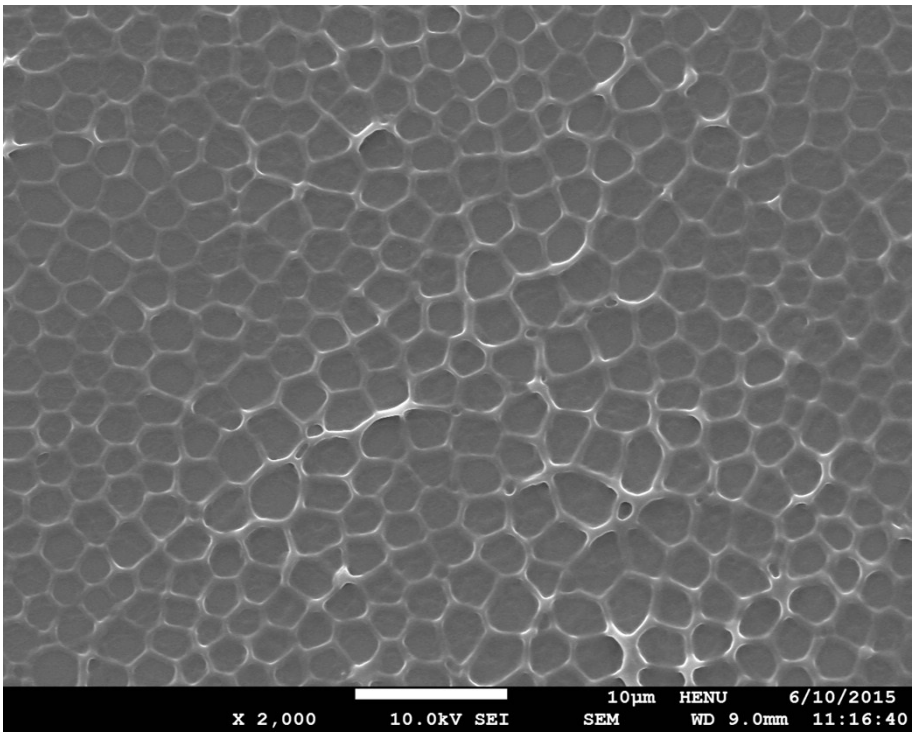

Figure S3 SEM images of AOB-t8 drop-casting film after 365 nm irradiation for 5 hours at room temperature.

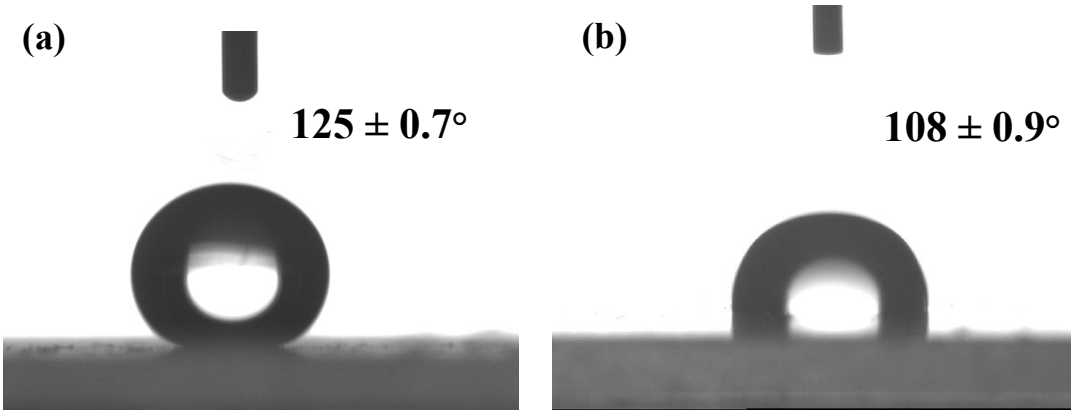

Figure S4 Photographs of the water droplet on the honeycomb-patterned films formed by 1×10^{-3} M AOB-t8 in DCE on (a) glass and (b) PVC sheet.

Experimental Section

Photo-irradiation experiment was carried out with a 250 W super pressure Hg lamp through a lightguide and an appropriate color filter ($320 < \lambda < 390$ nm for UV light). The intensity of the UV was ca. 7500 mW cm^{-2} at the tip of the lightguide. Contact angle (CA) measurements were performed using the sessile drop method (Dataphysics, OCA 20), in which the water droplets were introduced using a microsyringe, and images were captured to measure the angle of the liquid-solid interface. Each sample was recorded at five different points.