

Supporting Information

Superstructures and Superhydrophobic Property in Hierarchical Organized Architectures of Fullerenes Bearing Long Alkyl Tails

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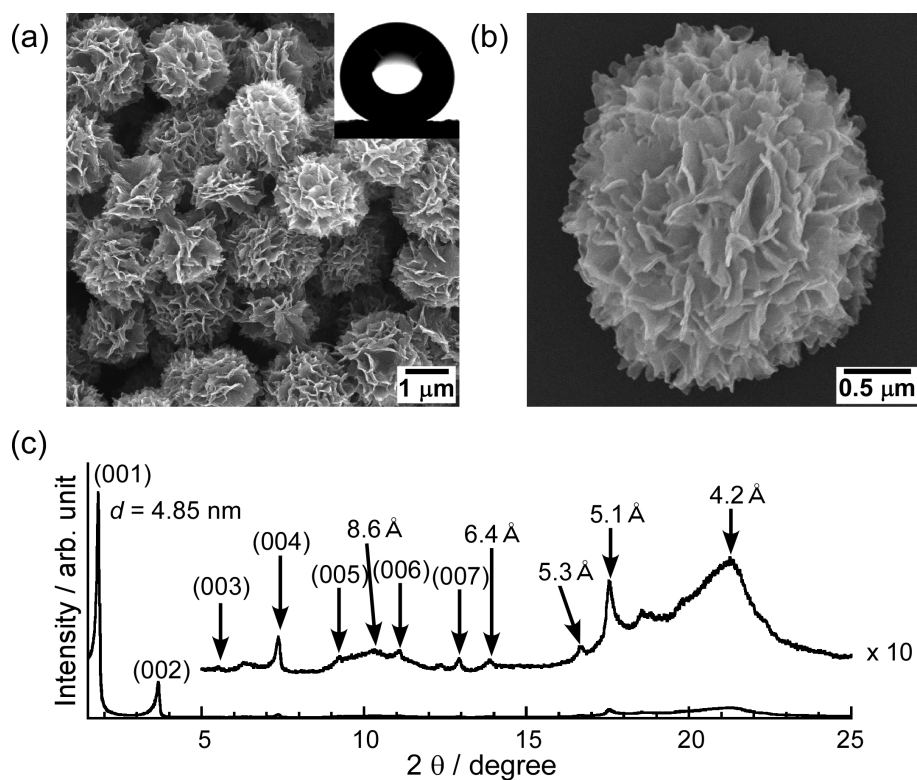


Figure S1. SEM images (a, b) of assemblies of **1** prepared from 1,4-dioxane at 20 °C. Inset of (a) is a photograph of a water droplet on the surface (static water contact angle of 152°). Powder XRD pattern (c) of the self-organized particles of **1** at 20 °C. The corresponding *d*-spacing value of the lamellae is 4.85 nm. The original results obtained from same molecule (**1**) in the same condition have been previously published in *Adv. Mater.*, 2008, **20**, 443.

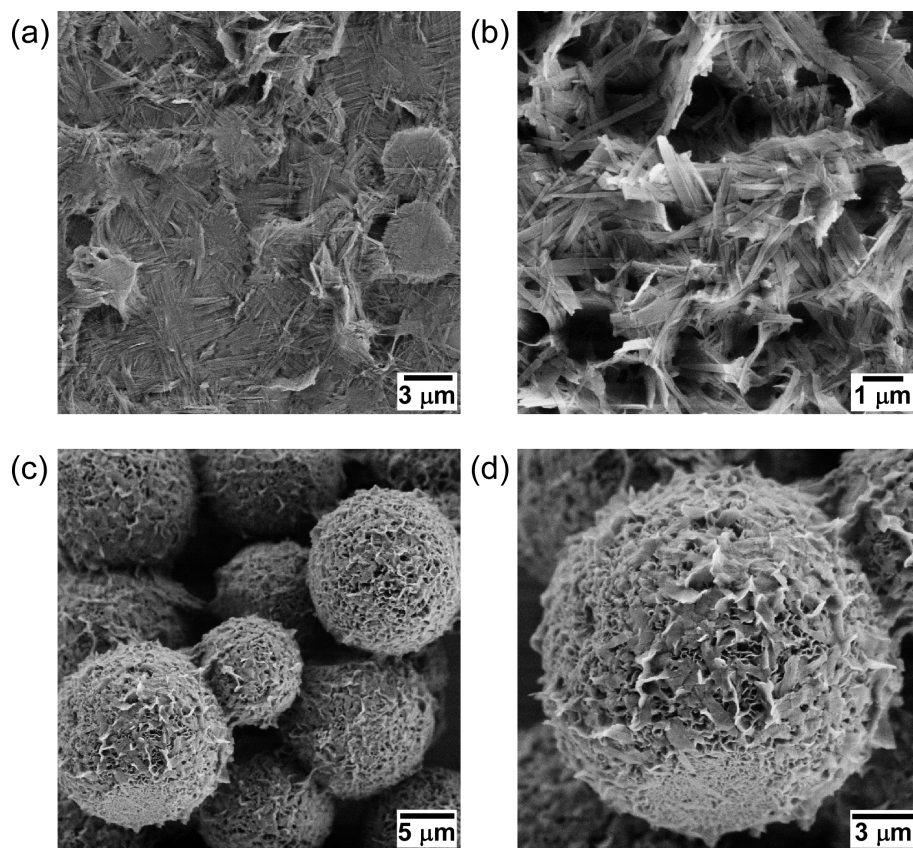


Figure S2. SEM images of assemblies of **1** prepared from (a, b) $n\text{-C}_{10}\text{H}_{22}$ at 20 °C (as aggregates of thinner belts) and (c, d) $n\text{-C}_{12}\text{H}_{26}$ at 5 °C (as nanoflakes-wrapped microparticles).

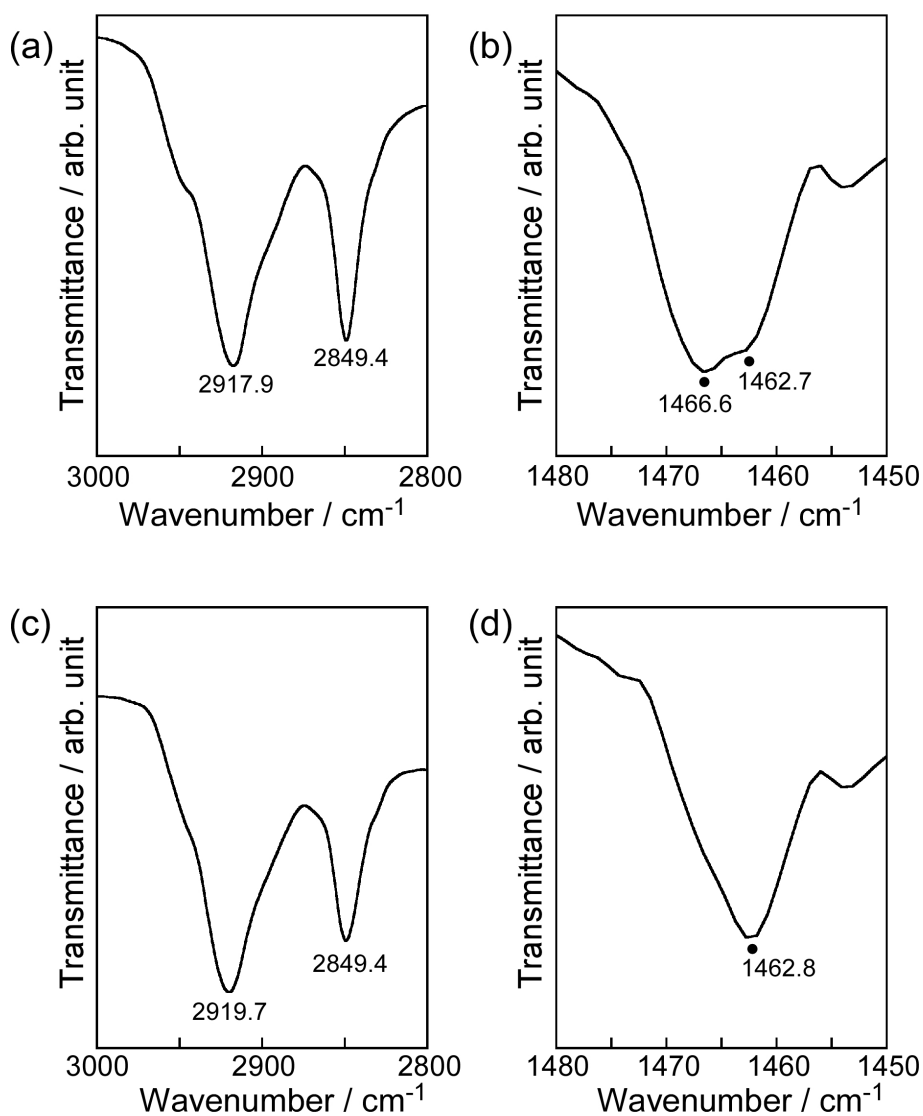


Figure S3. FT-IR spectra of the assembled objects of **2** (a, b) and **3** (c, d) displaying (a, c) asymmetric and symmetric methylene stretching bands and (b, d) methylene scissoring vibration bands at 20 °C. These results suggest that the crystalline states of alkyl chains in the assemblies of **2** and the non-crystalline states of alkyl chains in the assemblies of **3**, respectively.

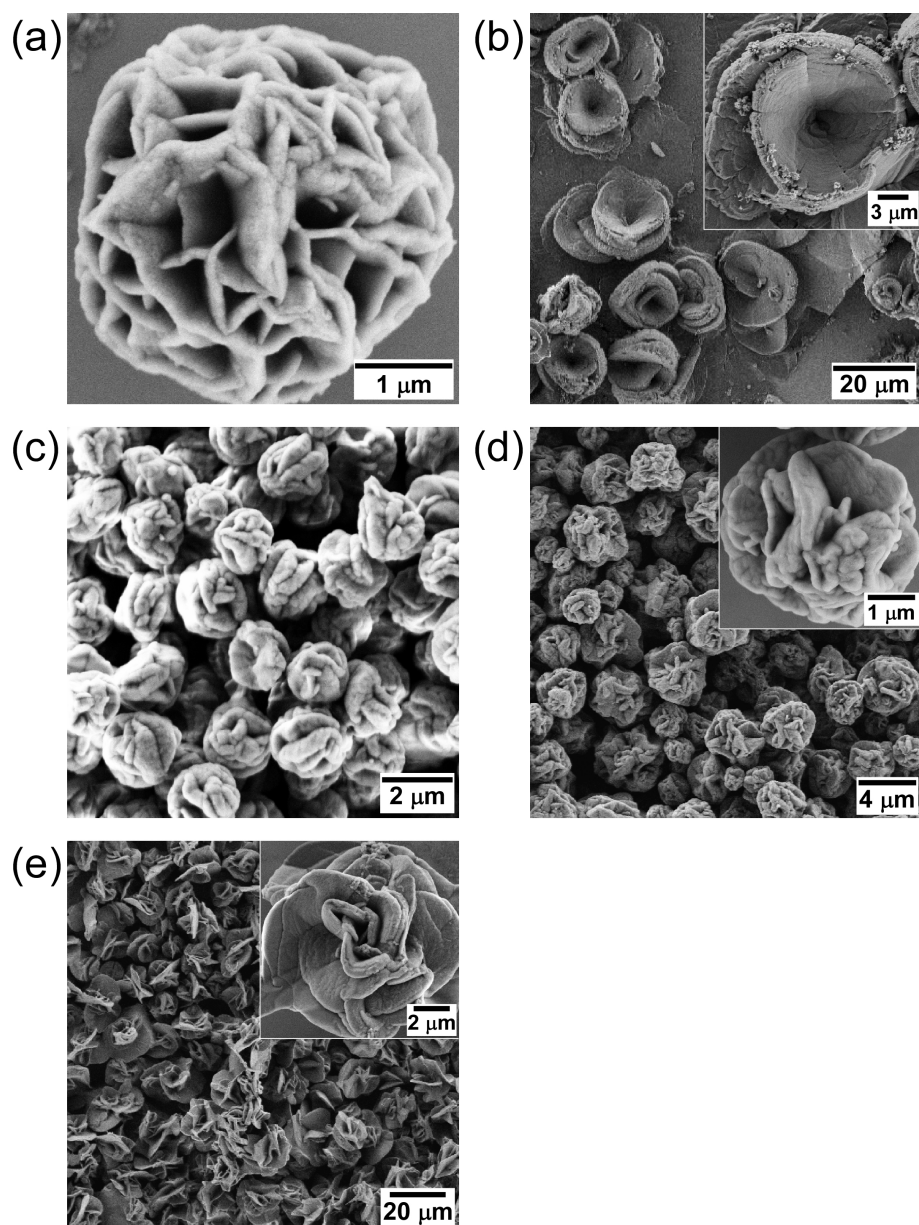


Figure S4. SEM images of assemblies of **4** prepared from (a) benzene at 20 °C, (b) toluene at 20 °C, (c) 1,4-dioxane at 20 °C, (d) a 2 : 1 1,4-dioxane/THF mixture at -14 °C, and (e) a 2 : 1 THF/methanol mixture at 20 °C, respectively.

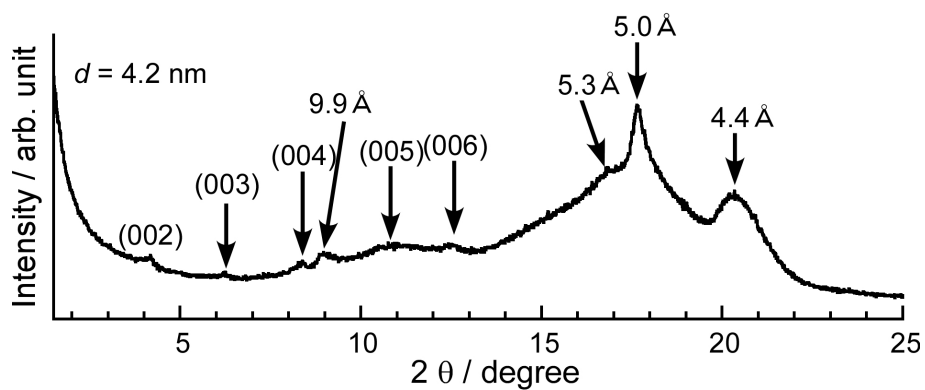


Figure S5. Powder XRD pattern of the assembled particles of **4** at 20 °C. The corresponding *d*-spacing value of the lamellae is 4.2 nm.