

Supporting Information

Curved Polymer Nanodiscs by Wetting Nanopores of Anodic Aluminum Oxide Templates with Polymer Nanospheres

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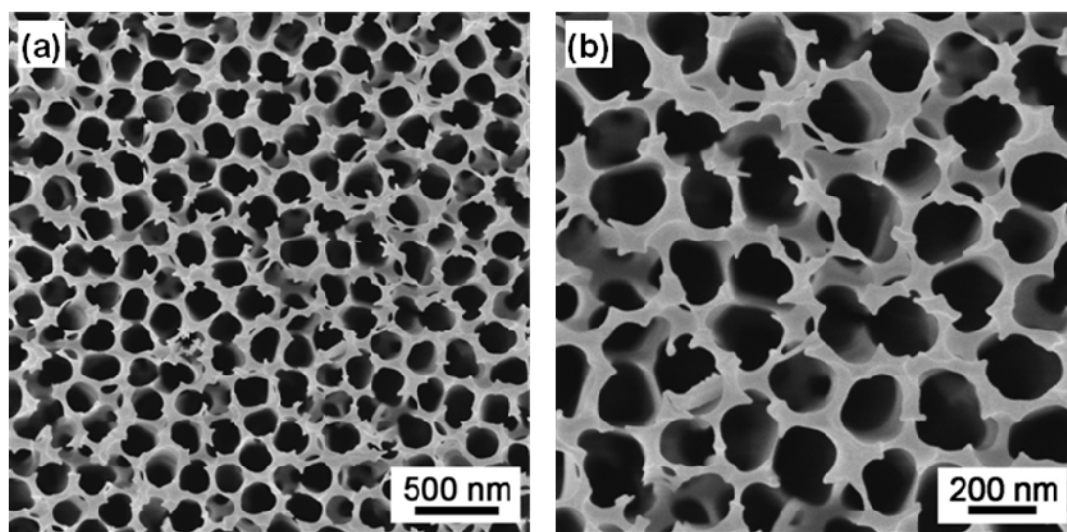


Figure S1. SEM images of AAO templates with different magnifications.

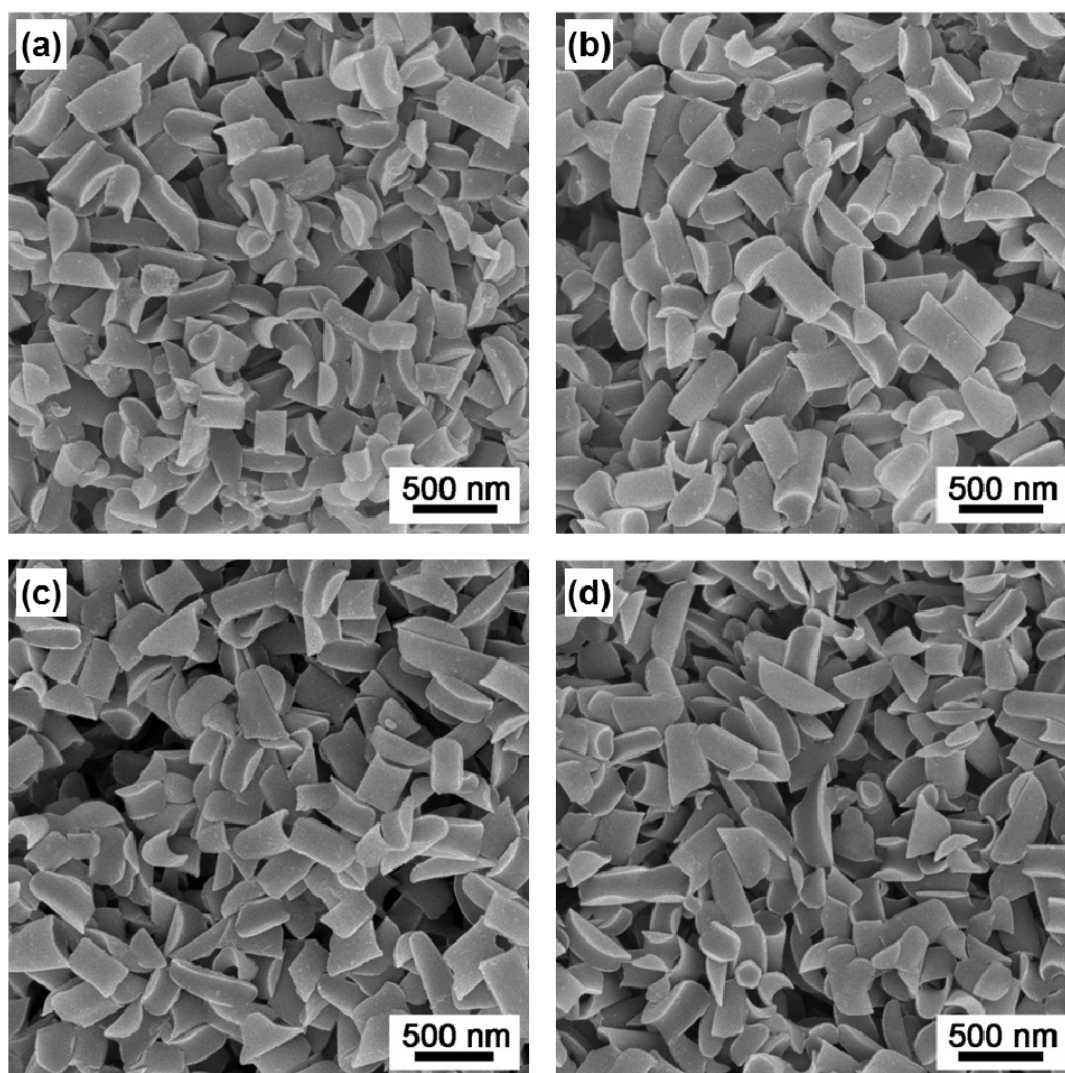


Figure S2. SEM images of PS ($M_w = 78.5$ kg/mol) nanostructures by annealing PS nanospheres at different temperatures for 30 min: (a) 150 °C; (b) 170 °C; (c) 190 °C; (d) 210 °C. The PS nanospheres are first prepared by the non-solvent-assisted template wetting method with a PS solution (3 wt %).

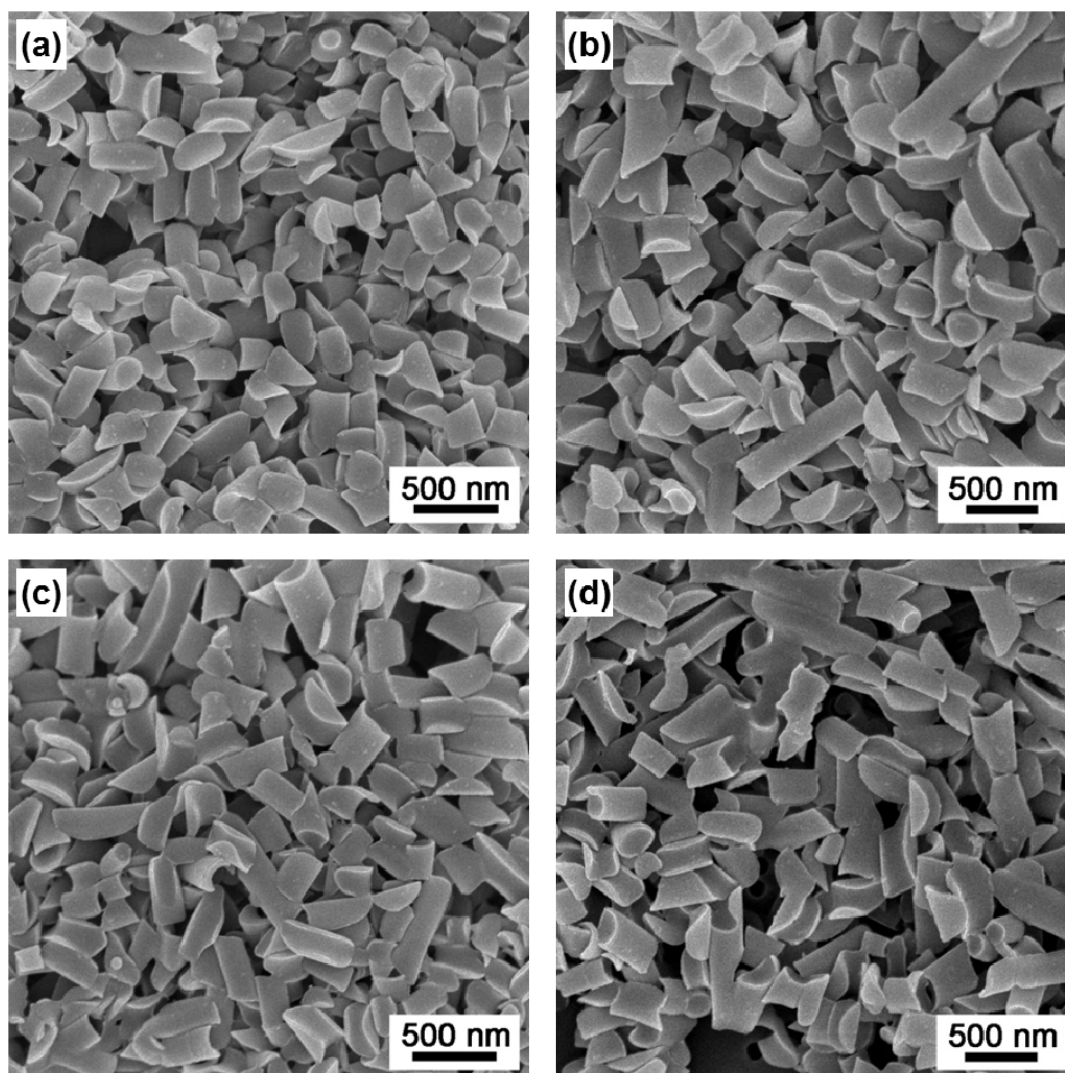


Figure S3. SEM images of PS ($M_w = 78.5$ kg/mol) nanostructures by annealing PS nanospheres at 130 °C for different times: (a) 20 min; (b) 40 min; (c) 1 hr; (d) 2 hr. The PS nanospheres are first prepared by the non-solvent-assisted template wetting method with a PS solution (3 wt %).

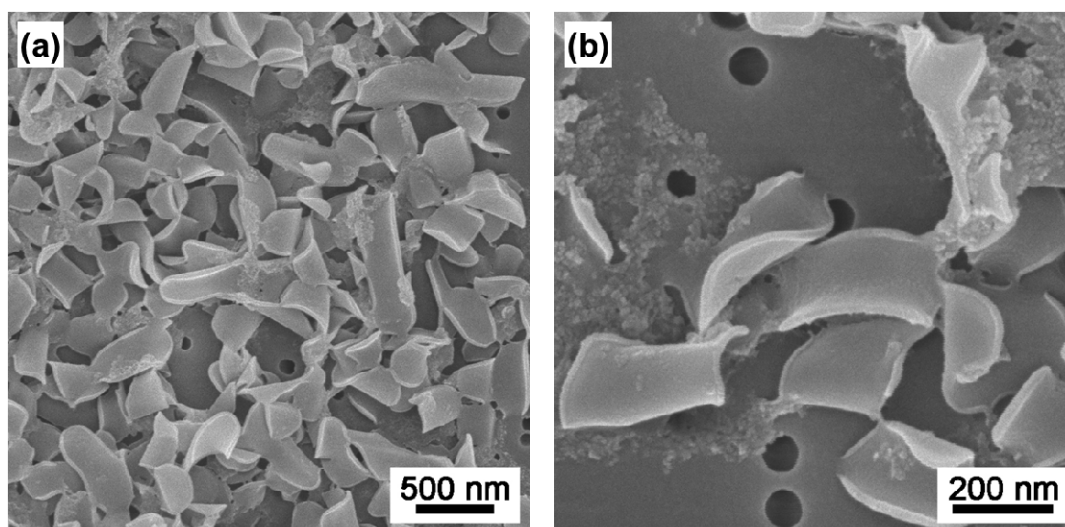


Figure S4. SEM images of curved PMMA ($M_w = 68.5$ kg/mol) nanodiscs with different magnifications. PMMA nanospheres are first prepared by 1 wt % PMMA solution in DMF. The nanospheres are then annealed at 150 °C for (a) 2 and (b) 4 hr.

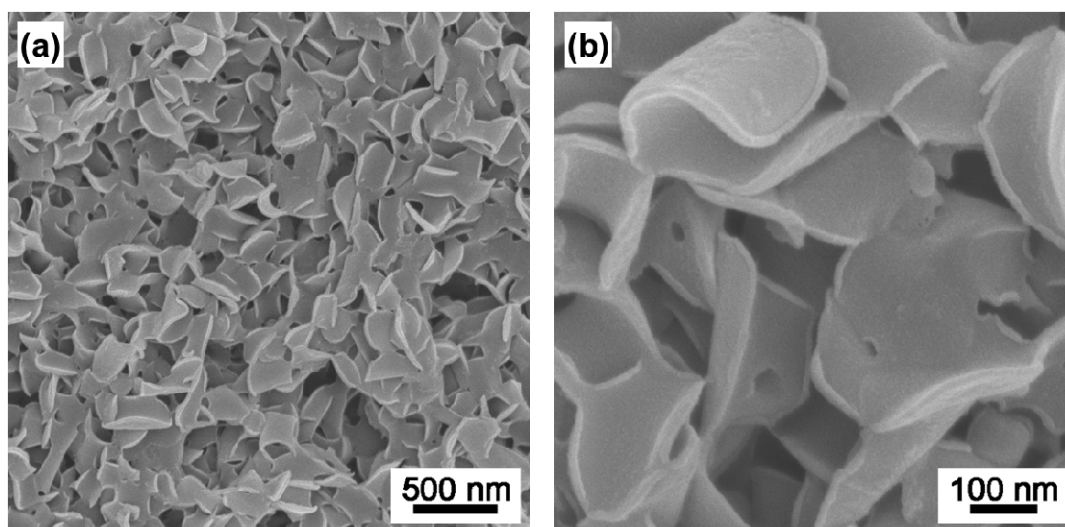


Figure S5. SEM images of curved ABS nanodiscs with different magnifications. ABS nanospheres are first prepared by 3 wt % ABS solution in DMSO. The nanospheres are then annealed at 150 °C for 30 min.

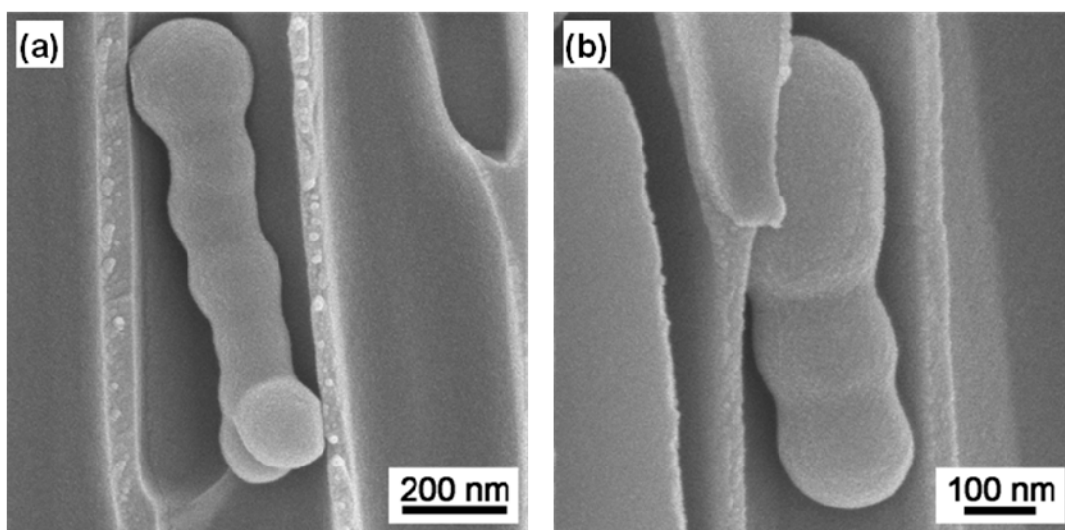


Figure S6. SEM images of attached PS ($M_w = 78.5$ kg/mol) nanospheres. The polymer-containing AAO templates are broken, and the cross-sectional view can be observed.

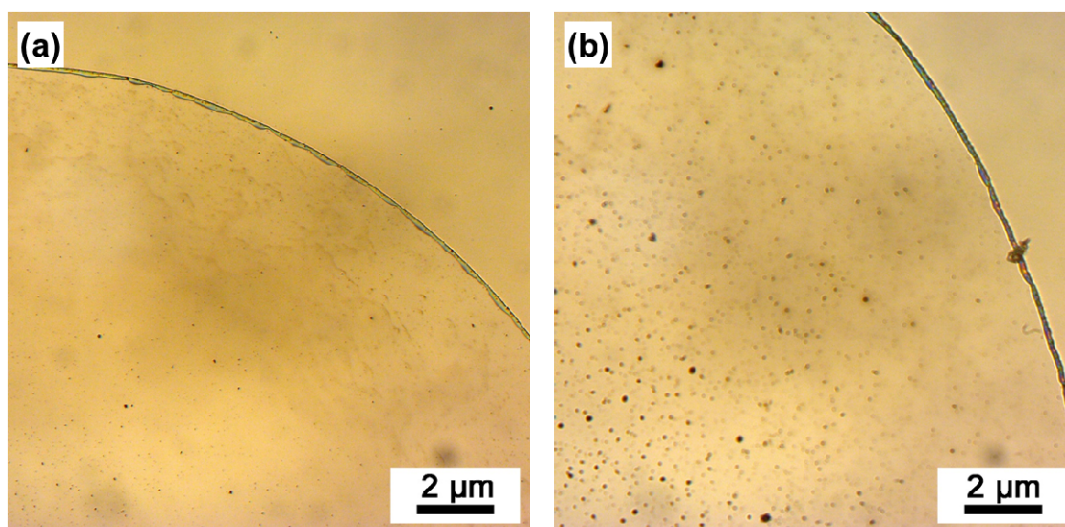


Figure S7. OM images of deposited polymer particles by dropping aqueous solutions containing polymer particles on cleaned wafers, followed by a drying process in air. (a) The polymer particles are PS ($M_w = 78.5$ kg/mol) nanospheres prepared from 3 wt % polymer solution. (b) The polymer particles are curved PS ($M_w = 78.5$ kg/mol) nanodiscs prepared by annealing the PS nanospheres at 130 °C for 30 min.