Electronic Supplementary Material (ESI) for Nanoscale.
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Electronic Supplementary Information

Janus nanoplates, -bowls, and -cups: Controlling size and curvature *via* terpolymer/homopolymer blending in 3D confinement

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Supporting Movies:

Supporting Video 1: TEM tilt series of JNB. The video shows a JNB on a carbon Cu grid with 10 nm gold nanoparticles. The tilt series was recorded from -60 to +60 ° in 2-degree steps.

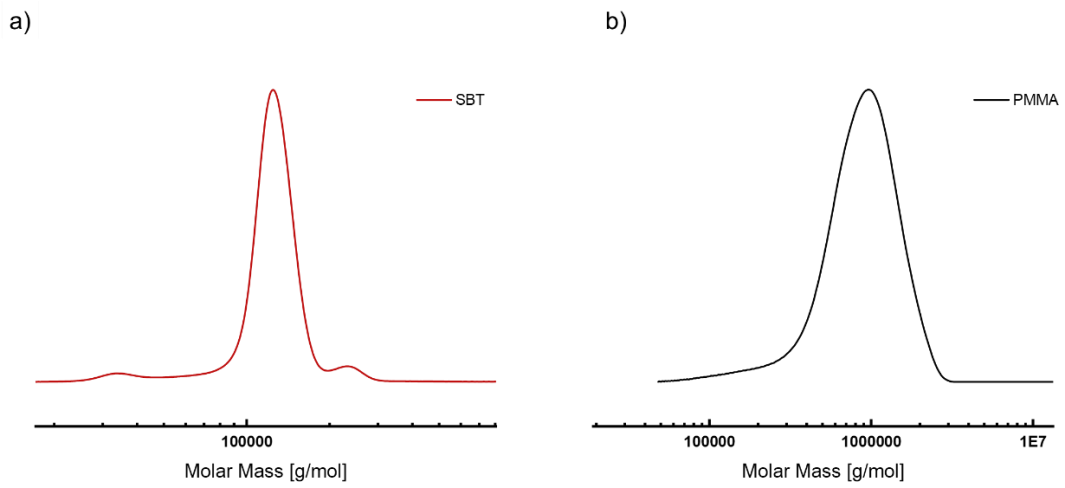

Fig. S1: GPC traces of SBT and *h*PMMA.

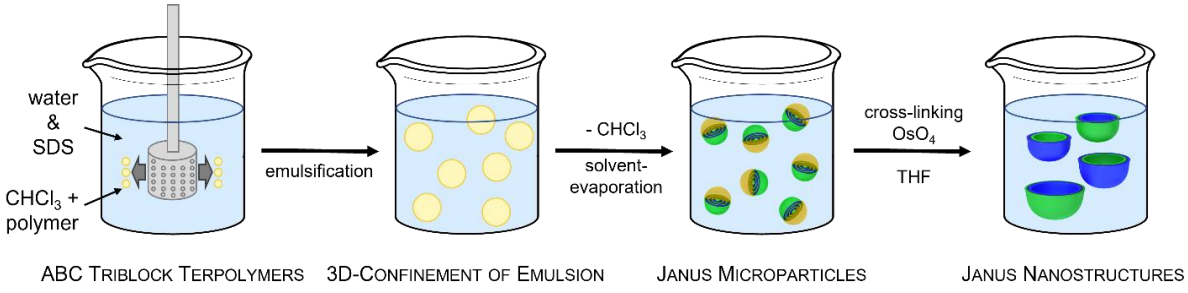

Fig. S2: Formation of BMPs and Janus nanostructures by SPG membrane emulsification.

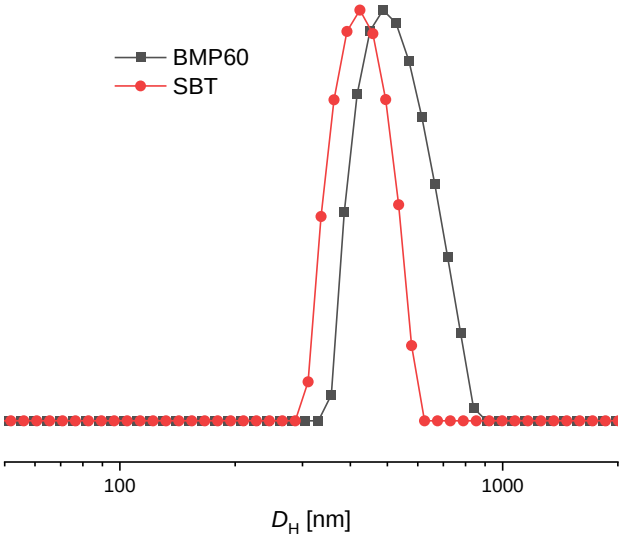

Fig. S3: DLS measurements of unblended SBT and blended BMP60.

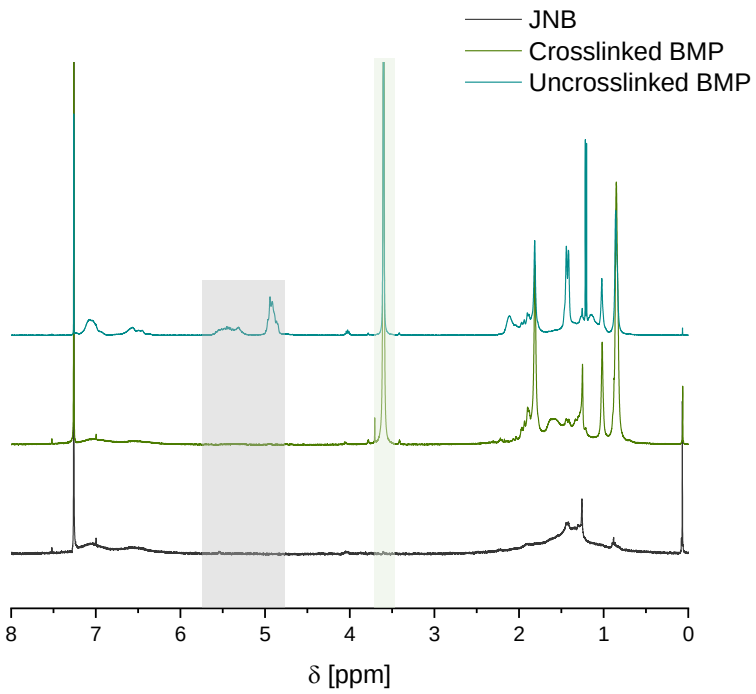

Fig. S4: NMR analysis of the crosslinking of the PB lamellae in BMP and subsequent redispersion of JNB. Successful crosslinking was confirmed by disappearance of the PB vinylic peaks at 4.8-5.7 ppm. Similarly, disappearance of the peak at 3.60 ppm confirms the removal of the *h*PMMA cap.

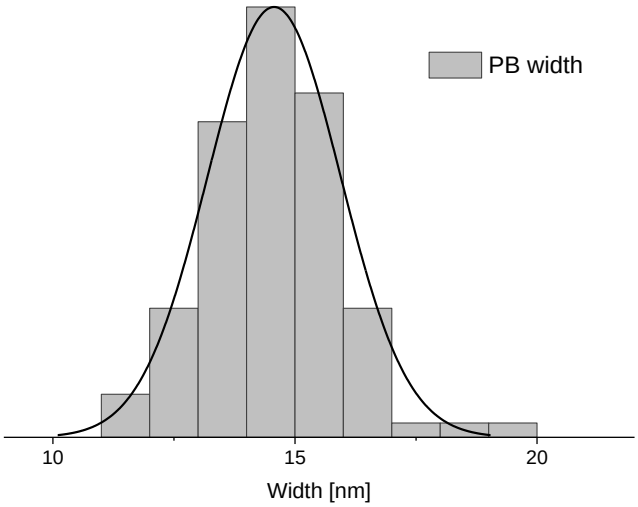

Fig. S5: Size distribution of PB lamellar width fitted with a gaussian distribution.

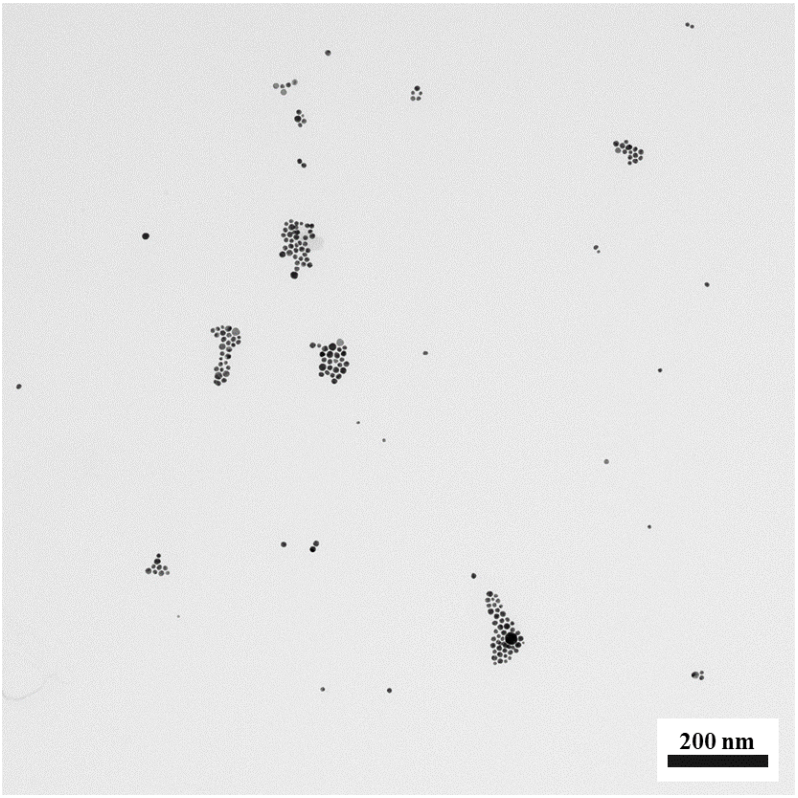

Fig. S6: TEM Characterization of positively charged Au-NPs.

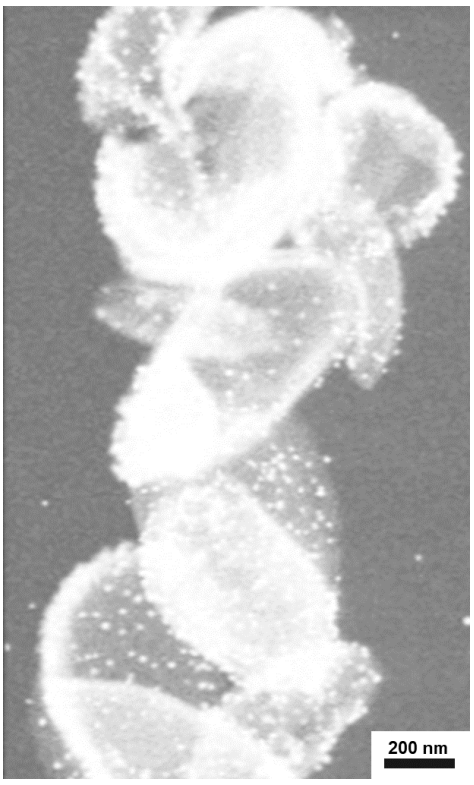

Fig. S 7: STEM Characterization of JNB with AuNPs.

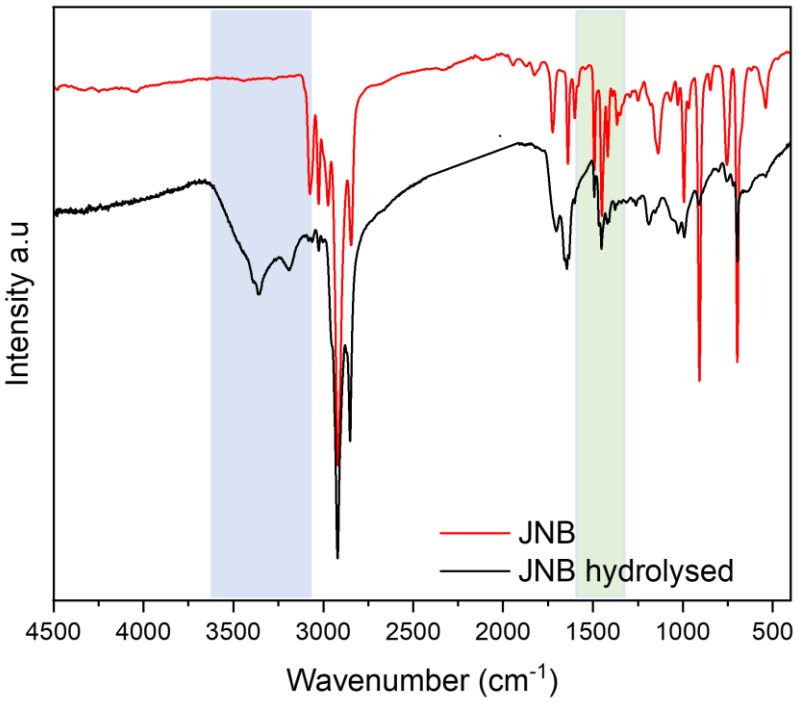

Fig. S8: IR-spectra of JNB and hydrolyzed JNB.

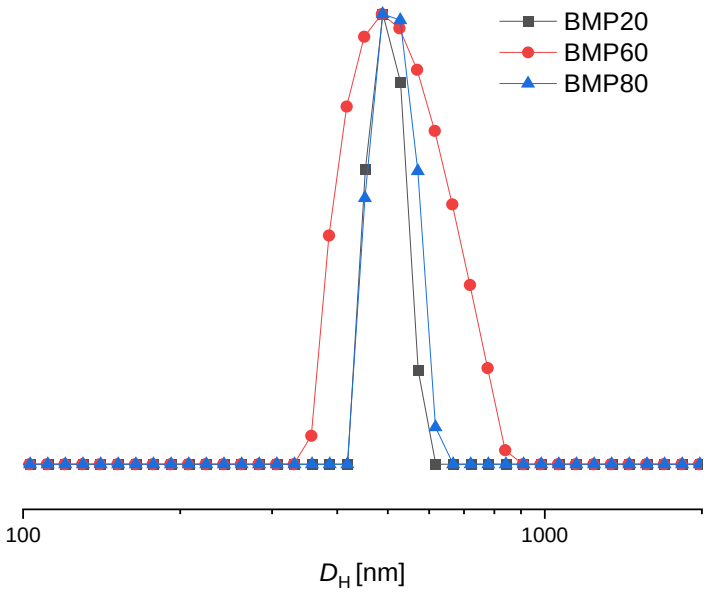

Fig. S9: DLS of BMP20,60, and 80.

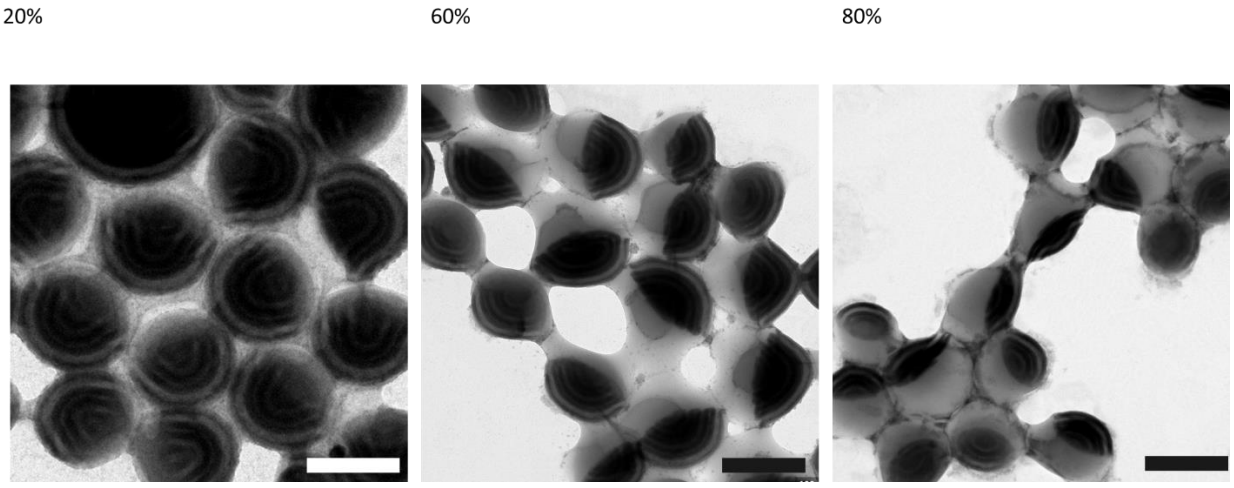

Fig. S10: TEM images of SBT microparticles, BMP20, BMP60, BMP80, with d_{pore} = 0.5 µm. (the PB block was stained with OsO_4; scalebars are 500 nm.)

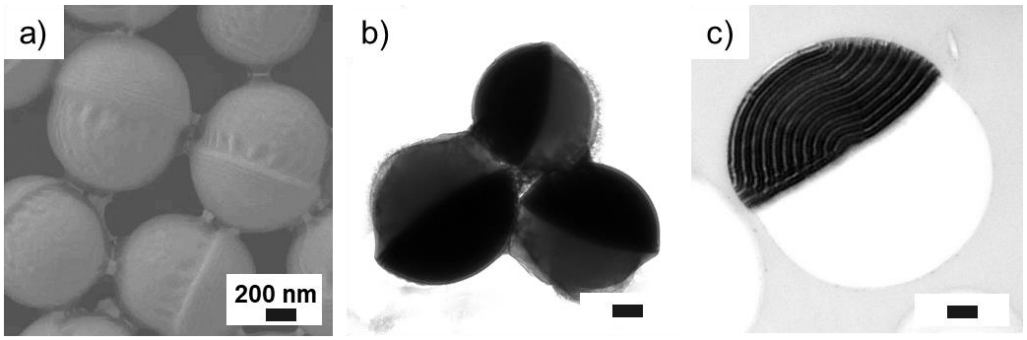

Fig. S11: BMP60 from a d_{pore} = 2.0 µm. a, b) TEM and SEM image of microparticles and c) TEM cross-section. (For TEM, the PB block was stained with OsO_4; scalebars are 200 nm.)